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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH
ANTIGENIC PEPTIDES

5 CROSS-REFERENCE TO RELATED APPLICATIONS

[1] The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

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[2] The following is a Table of Contents to assist review of the present application:

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[3]

BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells. When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., *Curr. Opin. Cell Biol.* 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern. Watson, S. and S. Arkininstall, *The G protein Linked Receptor Facts Book*, Academic Press, San Diego, CA (1994); Bolander, F. F. *Molecular Endocrinology*, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (e.g., adenosine, cAMP, NTPs), biogenic amines (e.g., epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (e.g., angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (e.g., cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (e.g., glutamate, GABA), ions (e.g., calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661
5 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto; and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

10 [21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide
15 sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8)
20 tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino
25 acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

30 [23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,

features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

DETAILED DESCRIPTION

15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of the GPCRs from which they have been derived to provide unusually specific and

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced
5 therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can
10 selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

15 [30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the
20 antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification
25 number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177,
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423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

10 [39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the
15 polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is
20 retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

25 [40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group, $-NH_2$, and one carboxyl group, $-COOH$. The alpha-amino acids, $RCH(NH_2)COOH$, are the building blocks from which proteins are typically constructed.
30 Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (*e.g.*, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "nonconservative" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, *e.g.*, lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "Antagonist" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes; and refers to, for example, intact
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (e.g., bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples
10 of antibody fragments include Fab, Fab', F(ab')₂, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. See US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized de novo either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (e.g., a mouse, a rat, or a rabbit) can be derived
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (i.e.,
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either

transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] "Biologically active" or "biologically functional," when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] "Annotation" refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] "BLAST" refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] "BLASTP" refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] "BLASTX" refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] "Buffer" refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] "CDS" refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] "Clone" in molecular biology refers to a vector carrying an insert DNA sequence.

[59] "Cloning" in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (e.g., plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "Cluster" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (e.g., a stringency).

[61] "Comparison window" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "Complementary" or "complementarity" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "Complex," or "aggregate," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "Composition" indicates a combination of multiple substances into a mixture.

[65] "Composition comprising a given amino acid sequence" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "Consensus sequence" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

[67] "Conservative changes" to an amino acid sequence, see Analog.

[68] "Deletion" refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.

[69] "Derivative" refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.

[70] "Diabodies" refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) on the same polypeptide chain (V_H - V_L).
10 By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).

[71] "Database" refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.

20 [72] "E-value" refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.

[73] "Expression vector" is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.

[74] "FASTA" refers to a modular set of sequence comparison programs used to compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.

30 [75] "FASTX" refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at $1e-6$ for finding genes; and at $1e-15$ for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

25 [85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

30 [87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, Fundamental Immunology, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (e.g., in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, Antibodies: A Laboratory Manual, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "In situ hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (e.g., the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

[94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.

10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.

15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,
25 probes, medicaments, and therapeutics.

[97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.

30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present.

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,

the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] **"Oligonucleotide"** refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] **"Operably linked"** or **"operably connected"** indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] **"Orphan receptor"** refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] **"PCR"** or **"polymerase chain reaction"** refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] **"Plasmids"** refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.

[107] "Polynucleotide encoding a polypeptide" indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

[108] "Portion" or "fragment" with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

[109] "P-value" is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] "Receptor" refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

[111] "Recombinant" refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic oligonucleotide process.

[112] "Sample" is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxemic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiforme, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (*e.g.*, the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about $T_m - 5^\circ\text{C}$ (5°C below the melting temperature (T_m) of the probe) to about $T_m - 20$ - 25°C for a cRNA probe and to about $T_m - 15^\circ\text{C}$ for an oligonucleotide probe. **"Highly stringent conditions"** refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about 55 - 65°C in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA would be 30 - 35°C . **"Very highly stringent conditions"** indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] **"Substantially purified"** refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

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C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (*i.e.*, peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

[125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences, which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

[127] ANTIGENIC PEPTIDES GENERALLY:

[128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (e.g., fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

[130] EXPRESSION PROFILES BASED ON PROTEINS:

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

[132] SCREENING FOR ACTIVITY:

[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art.

5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] **PROTEIN PURIFICATION:**

[136] The antigenic peptides and proteins or polypeptides containing them can be purified
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

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E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

30 [137] **SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5 [139] **SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

[140] Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10 [141] **LIST OF ASSAYS:**

[142] A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative
15 examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and
20 low-light detection assays. See U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

[143] **ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):**

[144] One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA
25 comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,
30 and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

[145] **IMMUNOFLUORESCENCE ASSAY:**

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:

[155] In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

[156] IMMUNOSTICK (DIP-STICK) ASSAYS:

[157] A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are the same and the format can either be simultaneous or sequential.

[158] IMMUNOCHROMATOGRAPHIC ASSAYS:

[159] In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

[160] IMMUNOFILTRATION ASSAYS:

[161] Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

[162] BIOSENSOR ASSAYS:

[163] A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential (μ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection limit of the assay is 1,000 molecules of urease per minute.

2. ANTIBODIES

[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:

10 [165] Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,
20 for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[166] The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

[167] ANTIBODIES GENERALLY:

[168] In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)*, 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain (V_L) and variable heavy chain (V_H) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, e.g., keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride, SOCl_2 , or $\text{R}^1\text{N}=\text{C}=\text{NR}$, where R and R^1 are different alkyl groups.

[175] ANTIBODY PREP - ADJUVANTS (ALL ABS):

[176] Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

[177] Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

[178] Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1 μg of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

(ii) Monoclonal Antibodies

[179] ANTIBODY PREP - MONOCLONAL:

[180] Monoclonal antibodies are obtained from a population of substantially homogeneous antibodies, e.g., the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.

10 [181] In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to form a hybridoma cell, Goding, Monoclonal Antibodies: Principles and Practice, pp. 59-103, Academic Press (1986).

[182] The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.

20 [183] Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal antibodies, Kozbor, J. Immunol., 133:3001 (1984); Brodeur et al., Monoclonal Antibody Production Techniques and Applications, pp. 51-63, Marcel Dekker, Inc., New York (1987).

[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSETM, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (e.g., by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli* cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

30 [188] **MOABS - COMBINATORIAL:**

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al., Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-5732 (1989), and Altling-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the λ IMMUNOZAP(H) and λ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

[190] HUMANIZED MOAB:

[191] Binding partners can also be constructed utilizing recombinant DNA techniques to incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites". For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. See Verhoeyen et al., *supra*; see also Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10 V_H, V_{Hb}, V_{Hc}, V_{Hd}, C_{H1}, V_L, and C_L regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAPTM(H) or IMMUNOZAPTM(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15 V_H and V_L domains may be produced, see Bird et al., Science 242:423-426 (1988).

[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

[195] CHIMERICS:

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

[197] ANTIBODY LABELING (ALL ABS):

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ^3H , ^{14}C , ^{32}P , ^{35}S , or ^{125}I ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, *J. Histochem. Cytochem.*, 30:407 (1982).

10 (iii) Humanized And Human Antibodies

[199] **HUMANIZED AB GENERALLY:**

[200] Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeven et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

25 [201] The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J_H) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA, 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

(iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form F(ab')₂ fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')₂ fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

(v) Bispecific Antibodies

10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, e.g., F(ab')₂ bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C_H 2, and C_H 3 regions. It is preferred to have the first heavy-chain constant region (C_H 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular significance.

[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:

[211] In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210 (1986).

[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":

[213] Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to unwanted cells, U.S. Pat. No. 4,676,980, and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP. 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

[214] ANTIBODIES - DIABODIES:

[215] The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) by a linker that is too short to allow pairing between the two domains on the same chain. Accordingly, the V_H and V_L domains of one fragment are forced to pair with the complementary V_L and V_H domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V_H and V_L domains of a first antibody joined by a 25-amino-acid-residue linker to the V_H and V_L domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using
10 chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')₂ fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is
15 then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992)
20 describe the production of a fully humanized BsAb F(ab')₂ molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers
25 (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')₂ heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are
30 linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.

b. Antibody Purification

[221] ANTIBODY PURIFICATION GENERALLY:

[222] When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., Bio/Technology 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

[223] BEFORE LPHIC:

[224] The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human $\gamma 1$, $\gamma 2$, or $\gamma 4$ heavy chains, Lindmark et al., J. Immunol. Meth. 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human $\gamma 3$, Guss et al., E.M.B.O. J., 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a $C_H 3$ domain, the Bakerbond ABXTM resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSETM, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

[225] **LPHIC:**

[226] Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. See US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (e.g., less than about 0.25 M salt).

[227] The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (e.g., cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (e.g., alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (e.g., a Phenyl SEPHAROSETM column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOWTM column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSETM High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSETM High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGELTM EMD Propyl or FRACTOGELTM EMD Phenyl columns (E. Merck, Germany); MACRO-PREPTM Methyl or MACRO-PREPTM t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C₃)TM column (J. T. Baker, New Jersey); and TOYOPEARLTM ether, phenyl, or butyl columns (TosoHaas, PA).

[228] The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (e.g., less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix; the other binds an indicator enzyme.

[237] **DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR.

Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-
10 p185^{HER2} antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

(ii) Assays

15 [240] ASSAYS:

[241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ³H,
20 ¹⁴C, ³²P, ³⁵S, or ¹²⁵I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

[242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,
25 *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.* 40:219 (1981); and, Nygren, *J. Histochem. and Cytochem.* 30:407 (1982).

[243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, *Monoclonal Antibodies: A Manual of Techniques*, pp.
30 147-158 (CRC Press, Inc. (1987)).

[244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.,* U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

(iii) Affinity Purification

[247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

(iv) Therapeutics

[249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

- other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious diseases or targeting immune complexes to cell surface receptors.

[251] THERAPEUTIC FORMULATIONS:

- [252]** Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol, A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

- [253]** The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

[254] THERAPEUTIC FORMULATIONS -STERILE:

- [255]** An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

[256] THERAPEUTIC ADMINISTRATIONS:

[257] The route of antibody administration is in accord with known methods, *e.g.*, injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, 5 intraarterial, or intralesional routes, or by sustained release systems as noted below.

[258] The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices 10 include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers, 15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOTTM (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-POLYMERS:

[260] While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of 25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S-S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives, 30 and developing specific polymer matrix compositions.

[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:

[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 5 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol; the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 $\mu\text{g/kg}$ to up to 10 mg/kg or more, depending on the factors
15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR
20 ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-
25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung
30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5 EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO₃, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15 EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 AFFINITY PURIFICATION OF ANTISERUM

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN₃.

 EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN₃ (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

[281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

[282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO® TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO® Target Retrieval Solution, 10x Concentrate (S1699), deionized H₂O, 20L container, with lid, marked at the 10L level, DAKO® TBS (Tris Buffered Saline-S1968), and DAKO Tween® (S1966).

[283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO® TBST into a 20 L container, b) add deionized H₂O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO® TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H₂O and pour into slide bath, b) measure 15 ml of DAKO® Target Retrieval solution, c) add to H₂O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H₂O, b) add 2 envelopes of DAKO® TBS, c) add 5 ml of DAKO TWEEN®, and d) replace lid and agitate 10 to 20 times.

EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

[284] Solutions for antibody detection are prepared using Vector® Biotinylated antibody (BA series), Vectastain® ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector® Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

[285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70% alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

Xylene 5 Minutes
Xylene 5 Minutes
Xylene 5 Minutes
100% Alcohol 2 Minutes
100% Alcohol 2 Minutes
100% Alcohol 1 Minute
95% Alcohol 2 Minutes
95% Alcohol 2 Minutes
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H₂O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope slides in immersed TBST. The procedure is to a) fill the steamer with deionized H₂O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H₂O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H₂O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% TweenTM 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –
15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.

- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then
20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.

- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody
25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is
30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein

10 and is not limited except as by the appended claims.

WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
 - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
 - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

- b) at least one of a reagent or a device for detecting the antibody.
16. An assay for the detection of a particular GPCR in a sample, comprising:
- a) providing an isolated antigenic peptide according to any one of claims 1-5,
- b) contacting the isolated antigenic peptide with the sample under conditions suitable
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific
for the particular GPCR present in the sample, to provide an antibody-bound antigenic
peptide, and
- c) detecting the antibody-bound antigenic peptide, and therefrom determining whether
the sample contains the particular GPCR.
17. The assay of claim 16 further comprising the step of binding the isolated
10 antigenic peptide or the antibody to a solid substrate.
18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.
19. The assay of any one of claims 15-18 further comprising, prior to the
contacting, obtaining the sample from a human being.
20. The assay of any one of claims 15-19 wherein the assay is selected from the
15 group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a
radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay
(ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an
immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a
biosensor assay, and a low-light detection assay.
21. An isolated nucleic acid molecule encoding an antigenic peptide according to
any one of SEQ ID NOS. 692-2292.
22. The isolated nucleic acid molecule according to claim 21 wherein the
25 molecule encodes a naturally occurring human antigenic peptide.
23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least
about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.
24. The isolated nucleic acid molecule according to claim 23 wherein the
antigenic peptide is at least about 95% identical to the antigenic peptide.
- 30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the
molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

5 27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:

- a) searching the candidate polypeptide sequence using a comparison window of the length, and
- 10 b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising
- 15 no charged amino acids.

28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.

29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.

20 30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.

31. The method of any one of claims 27-30 wherein the method further comprises:

- c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics: 1) sequences having at least 5 consecutive amino
- 25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.

32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.

30 33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.

35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.

37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.

10 38. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 20 amino acids.

39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.

40. The method of any one of claims 27-39 wherein the polypeptide is a protein.

15 41. The method of any one of claims 27-40 wherein the polypeptide is a human protein.

42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.

43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.

20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.

45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.

25 46. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.

47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim 43.

30 48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and

b) at least one of a reagent or a device for detecting the antibodies.

49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.

50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.

51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.

52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.

53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.

54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.

55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:

a) an isolated antibody according to any one of claims 49-53, and

b) at least one of a reagent or a device for detecting the antibody.

56. An assay for the detection of a candidate polypeptide in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 43-47,

b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.

57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to
any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	<p>MVSSGRMRSLWFIIVISFLPNTGFSRAALPFGLVRRELSCEGYSIDLRCPGSDVIMIE SANYGRITDDKICDADPFQMEYNTDCYLPDAFKIMTQRNNRQTQCVVTGSD VFDPDPCGTYYKLEVQYECVYFVFCPGTLKAIVDSPCIYEAQKAGAWC KDPLQAADKIYFMPWTPYRTDILIEYASLEDFQNSRQTTTKLPLNRVDGT GFVYVDGAVFENKERTRNIVKFDLRTRIKSGEALINYANYHDTSPYRWGG KTDIDLAVDE NGLWVYATE QNNGMVISQLNPYTLRFEATWETVYDKRA ASNAFMICGVLYVRSVYQDNESETGKNSIDYNTNLRGEYVDVPPFN QYQIAADVYNPRDNQLYVWNNFILRYSLEFGPPDPAQVPTTAVITTS AELFKTIISTTSITQKQPMSTTVAGSQEGSKGTKPPAVSTTKIPITNIFPLPERFCE ALDSKGIKWPQTQRGMVVERPCPKGTRGTA SYLCMSTGTWPKGPDLSN CTSHWVNQLAQKIRSGENAA SLANELAKHTKGPVAGDVS SVRLMEQLV DILDAQLQELKPEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ AHTAIMLDTLEEGAFVLADNLEPTRVSMPTENIVLEVA VLSTEGQIQD FKFPLGIKGA GSSIQLSANTVKQNSRNGLA KLVIHYRSLGQFLSTENATIKLGADFIGR NSTIAVNSHVISVSINKESSRVYLTDPVLF TLPHIDPDNYFNANCSFWNY SERTMMGYWS TQGCKLVDTNKTRITCACSHLTNFAILMAHREIAYKDGWH ELLTIVITVYGVISLVCLAICITFCFRGLQSDRNTIHKNLINLFIAEFILIGIDK TKYAIACPIEAFLLHFFLAFAWMCLEGVQLYLMLVEF ESEYSRKYY YVAGYLFPATVVGSAADYKSYGTEKACWLHVDNYFIWSFIGPVFIILNLIFLVITL CKMVKHSNITL KPDSSRLNIKSWVLGAFALICLLGLTWSFGLLFTNEETI VMAYLFTFNAFQGVFIFFHCALQKKVRKEYGKCFRHSYCCGGLPTESP HSSVKASITRTSARYSSGTQSRURMWNDTVRKQSESSFIGDINSTSL NOGHSNNAR DTSAMDITLPLNGFNNSYSLHKGDYNDVQVVDCCGLSND TAFEKMISELVHNNLRGSSKTHNLELTLPVKPVIGSSSEDDAIVADAS SLMHSNPLGL ELHHKELEAPLPQORTHSLLYQPKKKVKSEGTDSYVSQLT AEAEHDHLQSPNRDSL YTSMPNLRDSPYSPSPDMEEDLSPSRSENEIDIY YKSMPLNLAGHQLQMCYQISRGNSDGYIPIKEGCEPEG DVREGQMQLV TSL cggcgctgg gagacagcga gccagagctt ggggtgtgtt gcgagagcca cggcgggggc tggggcgagt gggcgcatg gctgaaggct gcgctctgca acctgaaga gcgcctgcat tgagaggcca gggacagaga gaccgtgagc atggcagagc cggccccccg ccgctgctgg cggccggccc ggcctggctg agccgcggga gggcggggc tgcctctggc cgtccatgga gacgcgggaa gggcgaaact ccggagcggc gcgtccctgc gcgcctggc cggactgctg aaggggccga gccgcgcggg acc-gcc-gagg aagagagacc ccctccagcc cgcaggccgg cggccgggg gcggcggggg acatcgagg gacgcgggac gagcagcgcc gcgggagagg ccggcggggg agggcggggc agcaatgcc gggccggtag ggcctgctg cttctcggc ctggggctgc tggctcggc cggggccagc ggcggcgccc cgcctctg cggggggccc tgcagctggc acggcgacc tcgggtggac tgcctcggga agggcgctgac ggcctggccc gagggcgcca gcgcctcac ccaagcctg galatcagta tgacaacat tactcagtg ccagagatg cattaaaga cttctctt ctgaagagc tacaatggc gggcaacgac cttcttta tcaccacaaa ggcctgtgtt ggggtgaag aactcaagt tcaacgtc cagaataac agttgaanaac agtaccagt gaagccatic gaggcgtag tgcctgtag tcttgctt tagatgcaa caataacc tgcgtcccg aggcaggtt tgaaggact</p>	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490	<p>SLMHSNPLGL ELHHKELEAPLPQORTHSLLYQPKKKVKSEGTDSYVSQLT AEAEHDHLQSPNRDSL YTSMPNLRDSPYSPSPDMEEDLSPSRSENEIDIY YKSMPLNLAGHQLQMCYQISRGNSDGYIPIKEGCEPEG DVREGQMQLV TSL cggcgctgg gagacagcga gccagagctt ggggtgtgtt gcgagagcca cggcgggggc tggggcgagt gggcgcatg gctgaaggct gcgctctgca acctgaaga gcgcctgcat tgagaggcca gggacagaga gaccgtgagc atggcagagc cggccccccg ccgctgctgg cggccggccc ggcctggctg agccgcggga gggcggggc tgcctctggc cgtccatgga gacgcgggaa gggcgaaact ccggagcggc gcgtccctgc gcgcctggc cggactgctg aaggggccga gccgcgcggg acc-gcc-gagg aagagagacc ccctccagcc cgcaggccgg cggccgggg gcggcggggg acatcgagg gacgcgggac gagcagcgcc gcgggagagg ccggcggggg agggcggggc agcaatgcc gggccggtag ggcctgctg cttctcggc ctggggctgc tggctcggc cggggccagc ggcggcgccc cgcctctg cggggggccc tgcagctggc acggcgacc tcgggtggac tgcctcggga agggcgctgac ggcctggccc gagggcgcca gcgcctcac ccaagcctg galatcagta tgacaacat tactcagtg ccagagatg cattaaaga cttctctt ctgaagagc tacaatggc gggcaacgac cttcttta tcaccacaaa ggcctgtgtt ggggtgaag aactcaagt tcaacgtc cagaataac agttgaanaac agtaccagt gaagccatic gaggcgtag tgcctgtag tcttgctt tagatgcaa caataacc tgcgtcccg aggcaggtt tgaaggact</p>	A	Homo sapiens

gttacgttac gggatctgtg gctggaatgac aacagcttga cggagggggc tgggcaccc ctacagcaatc tggccacct
 ācagggcgtg accctggctc tcaaaagat ctacagatc cctgacttg cattacca cctttacagc ctgggtagt tgcattctca
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 acatttgcā ctgtacatc actggcttg tcaaaatgt taaagctt gattctgtg tcaactat tcaagggaat ctatctggc
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 aatgggaagā gcaatcatc caaacatc cgggtgtgt ccaactggc ttccatgt gctacagtag caggctgttt tccctttc
 ctatgggggg alatctgc atcaaccti tggttccat ttctacaggg tgaacggca tcaataggat tcaatgaac gttgtgtcā
 taaactac tagcatttt ataaaggcc gttatctā ctgaacttā ctgcaacttg gaaaaagggg accctcaga aaactacaa
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 ttctcaacc caaagttaā agaaagcttg aagtctga agcgaagt taccagaāā agttggatcag ttacgtttc calcagtagc
 caagggtgtt gcttggaaaca ggtatttctac taccagctgtg gcaatgtatc accatttgcag ggcacacttga ctgttggcga
 ctgtctggcgaā tctgttctt taaacaaggcc agtaatcāg aaacacttga taaatcaca cagctgtctc gcaatggcag tggctcttg
 ccaaaagact gagggtact ggtccgactg tggcacaag tggccact ctgattatgc agatgaagaa gattccttg
 tctcagcag ttctgaocag gttcagggct gttggcagc cgtctctac cagagtagag gattccctt ggttggctat
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 taticatc ttatctgt gaaagcactc tgaatcatc gcttgggt aaaaatgcaā tgttcaagca agttgaatc ttttgaac aaataatga
 gttatttca aagaaaggt gcttaatā taaatgggt aaaaatgcaā tgttcaagca agttgaatc ttttgaac aaataatga
 ctggaaagg acttgggtg tggatgagca alataatgt agttttct gattcatalag aagcaaat atacctat gttatgaag
 cacaagataa agaaagctg ttatatt taaatct atttāaaat gttatct alacttgaag aaaaatct gttatattā
 cctaatgt cacttaat ctacgggcaā ctacttgcag ggcacaaāā gggcagctcc cagctagaac tggatgaagā
 tacaaggca ttacttt agttttac ttggcatct tgaataaagā gaaatāāā ttgtttāā gcaattāā aatcaāāā
 ctgaagatgt tttaāaca alataacag ctgttgggt aaaaatag ctgggcat ttgttgcact attatct gtttggctcc
 aatcagatāt ttcttāā gttttgtg attacatc tagaaaaāā gtaaaaggct aatgtctgtg tgggttāgt ctgttggct
 aaactactāā ctatgtggg gtttāatg tcttgggg atttgggtg ttatgtat gttctatā atgaatāct ctaatctg
 ttggctctac taatttt caattgtgg ggtatgcacc tagcaatagc ttggatāā tagaaagāā acttgggtcā alacttgcā
 ttatagac gaaaggga gaaatāāā caggaatgā ttatgtat ttcttāāā gctggatāt ctggaacttg tctatāāā
 tggaaattc calactat cccatāctā ttattāā aaggccctat tcaatgtc agaggttgaā ctcttggtaā acaagataat

528	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	<p>atgtatataa taaataaaga agaaagaaga ataaagctta gtctgtgtc ttataaatt aaaaatttta ctgtattccc atctatgggc tttagacctt ttactgggtg gagcttaaaa gttataatgt ttcaataatgt tttagaaca gtgtgtcaaa tcaatagcaaa accactggcc atattagttta ttctgaatat actataaaaa tccagctaga ttgcagtta aataataaac tgcataact gtgcataaa tgaattttta tctatgtaa atattttta gaacaaagt ttgagaatgt tggcttgtgt catttgttt aattaaagt accctctaaa ctatagtggc tgcagtagc agactgttaa atgtgtgtt atatactt tgcattgtaa atagtcttt ttgtacatgt tcaagttaat aaaaacagaa tctttgata tcaaatcat gtatgttga taaatgttg gaagattta ttacagtgt gtgttaatt tgaaggcca actatttaca agttttaaa attgcataca tgcatttga taaatgttg caacttgt aataataaa tcaatactgt gaagaaact cctaataaa aggttttc caaaattcag gttattgaaa attttcat ttattcat azaaactaga ataacagata taaaaagtg ttaactgtg tgcataatgg tatgaatac aataatgtac tcaagtgtt gaattataa agttctaga aagcaaaaa a</p> <p>MPGFLGLLCLF LALGLLSAG PSGAAPPLCA APCSCDGD RR VDCSGKGLTA VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEEQLQAG NDLSFIHPKA LSGLKELKVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSVPEDSFE GLVQLRHLWL DDNSLTVPV HPLSNLPTLQ ALTLALNKIS SIPDAFTNL SSLVVLHLHN NKIRGLSQHC FDGLDNLETL DLSYNNLGEF PQAIKARPSL KELGFHSNSI SVPDGAFDG NPLLRTHLY DNPLSFVGN ASHNSDLHS LVRGASMVQ QFPNLTGTVH LESLTLTGK ISSIPNNLCQ EQKMLRTLDL SYNNIRDLPF FNGCHALEEI SLQRNQYQI KEGTFQGLS LRILDLSRNL IHEHSRAFA TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNL SLSPYAYQC CAFWGCDSYA NLNTEDNSLQ DHSVAQEKGT ADAANVTSL ENEEHSQIII HCTPTGAFK PCEYLLGSWM IRLTVWFEL VALFFNLLVLTTFASCTSL PSSKLFGLI SVSNLFMGIV TGLTFLDAV SWGRFAEFGI WWETGSGCKV AGFLAVFSE SAIFLLMLAT VERSLSAKDI MKNGKSNHLK QFRVAALSAF LGATVAGCFP LFRGEYSAS PLCLPFTGE TPGLGFTVL VLLNSLAFLL MAVIYTKLYC NLEKEDLEN SQSSMKHVA WLIFNCFR CRVAFTSFAP LTAISPE IMKSVTLIFF PLPACLNPVL YVFFNPKE DWKLLKRRVT KKSQSVSVSI SSQGGCLEQD FYDCCGMYSH LQGNLTVDCD CESFLLTKPV SKHLKSHS CPALAVASQ RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC FYQSRGFPLV RYAYNLPRVK D</p>	P	Homo sapiens
529	160435	LS160435 Receptor	AX147830	<p>aacttgaagg gcagccgtt gccgccacg aacacctct caagcattt gggtgaccac ggcttgcaag ctgtgtggctg gcccccag tcccgggtc tggggcagg ccgtcgaact aagcttgca tctgttacc ttgagacccct ctgagcttc acctgtact tctgcgcgtg ctctgcaca gagccgggc gaggaacctt ccaggatgca ggctccgaac agcacggcc cggacaagc gacgttgca gtcgtggga accggcgat cgcgggtggcc ctgcocgtgg tgtactcgt gggtggcggc gtcagatcc cgggaacct ctctctg tgggtcgtt gccggcgat ggagccaga tcccgtcgg tcaictcal gatcaacct agcgtcagg acctgagct ggccagcgtg ttgccttcc aaatcacia caatgcaac cgcacact gggtttcgg gggtgtgtt tgcacgtgg tgcacgtggc ctgtaccca ggcgtgggc cgcgtgtt accgtgtgg tgcacaggg tggagcgctt ccggggggc ctgtaccca ggcgtggc tcccgtcgg cgcgtggc cgcgtggc cgcgtgtgca gggaccitgg tgcgtctt gaccgcctg tcccgtcgg cgcgtggc tctacccac ccgtgtcag ccctggggcat catcaccitg ttgcagctc tcaagtgagc gctgtccc agcgtggcca tgggtggcgt gttctcttc accatitca tctgtctt cctatccc ttctgtgaca ccgtgtgtg ttacaggcc accatitca agcgtgtg caccggaggag gcgcacggcc ggagagcagc gggtggcggc gggtggcggc ctgcgtggc ttgtcatctt</p>	A	Homo sapiens

530	160435	LS160435 Receptor	LR80	<p>gcttcgcccc caacaacttc gtgtctctgg cgcacatcgt gtagccggcttg ttactacgga agagtactia ccaagtgtag aaagctacgc tgtgtctcag ctgtctcaac aactgtctgg acccggttgt ttactacti gctgtccggg aattccagct ggccttgggg ggaatttgg gctgtccggg ggtgtccagg gacacccctgg acacggccgg cgaagagccct ttcttcggca ggaaccagtc cgtgtcccttc gaggccgggtg cgcacccctga aggtgagggag ggaagccacca ggcacggctt ccaagagggcag gaggagtggt ttcaggtccc gggggcgccag ctggagagagc cggggggccga gcttggagga tccagggggc catggagagg ccaaggggccc agaaggtcag ggaagacag tgcgtgtctc cagggcactg cagagggccc gttggggagg gttccagggc ttattcttc ccaagcactg cagaaggcac ggtgagggag ggttccagg cttactcag ggttggagaa caagcaaaagc ccaagcagcgc acaaggggtc tgtatcttg cagaaggggtc ctgtgtctc ctgtgtcagg ggaagcttg tgcacacag cccggctaat ttgtattt ttttttag agctgggtg tcaccccca gctctttag cactctcac accgttccat accggaggat ggaatttcaa ccagccccc accgtaccog actgggttc tggalatct ctgtggggcga actgcagacc ccaattccag ctctctccc tcttgacatc gttccatgc acactgtcc ataccggagg atggatatt accagcccc accgtctacc cgaatgggt tctggatatt ctctgtgggc gaactgcag cccattccc agctctctc cctgtctaca tctgtcccta gttgtgttc tggcccttc cattctctc cagggggtct ggttccgta gcccgggtga cgcgaat tctgtttat tcactcaggg gcactgtgtg tctgtgtg ggaattctc tticagagg ggcctgggg cctctgcaag tcaagctac tccgtggcca ctctcccca cacacacac ccccgtgc cgaattc</p>	P	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308	<p>MQVPNSTGPD NATLQMLRNP AIAVALPVVY SLVAA VSIPG NLFSL WVLCR RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANMYSS ILTMTCSIVE RFLGVLYPLS SKRWRRRYA VAAcAGTWLL LLTALSPLAR TDLTYPVHAL GIITCFDVLK WTMLPSVAMW AVLFITFIL LFLIPFVTV ACYTATILKL LRTEEAHGRE QRRRAVGLAA VVLLAFVTCF APNPFVLLAH IVSRLFYGKS YYHVYKLTLC LSLNCLDP FVYFASREF QLRRLREYLCG RRVPRDILDT RRESLFSART TSVKSEAGAH PEGMEGATRP GLQRQESVF gaatggccc aaagagcct atgtctct gaagcttgc agcaaggctt gctgaggct acagagata gccacgtgt ttggagggg ttgtgaagt gattctgaga tcaagctgac tgaagtgga tctgtgctt atacttacc agctacaaa ccttggagc ttagaattt ttctttca ataggcagc atcttact tcttcaaga tgacaacag ttgttcttc tgcacagtt ataaagatc ggaagccatt acgtattt ttattagt ttctctgt ggaattatg gaagtgtt tgaaccttg gctttatc agaagaatc gaatcaggg tgttgagca tcaactaat taattgtt acagcgatt tctgtctac tctgtctac ccaagagaaa ttgtgtga ctgggtgtg gaccttga agctgaagt altccagtc caaggaacag cttgctctat ctatcaat agtattat caattact cttagcatt gtacagatg accgtgtct tcaagtgaca cagagctgca agatcaccg aatacaagaa cccgggttg ccaatagat altcaacgtt gttgtggtaa tggctctct taaatggg ccaataga tgaattccat caaagacatc aaggaagaat caaatgtgg ttgttgag ttaaaaag aatttggaag aaatggcat ttgtgaca atttcaat tgaagcaata tttaaalt tcaagccat calttatla tcaatgcc ttgaattg acagcttcc agaaacaaag aiaatgaaaa ttacccaat gtgaanaagg ctctcatca caacttta gtagccagg gtiacatcat atgttgtt cttaccaca ttgtccaat cccgtatacc ctacggcca cagaagatcat aactgtatgc tcaaccaga ttacattct caaagccaaa gagggtacac tgcctcggc tgtgtcaac ctgtgttg atctatct gtiacatcac ctctcaaaag catcggctc aaaggtcat gagaatttg cctcaccaa agagaccaag gtcagaagag aaaaattaa atgtgaat aatgcaaaa agacaggat ttgtgcta ccaatttgg ccttactgga ccaataagt aattatgct ttgaagata aaaaaaaa aaaaagggcc gc</p>	A	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1	<p>MTNSSFFCPV YKDLPEFTYF FYLVFLVGI GSCFATWAFI QKNTNHRCSV IYLNLLTAD FLTLALPVK IVVDLGVAPW KLIHFQCVT ACLTYNMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLIMVPM MPIKDIKEK</p>	P	Homo sapiens

GKRRSLDGS ESAKTSLQVT NLVSAIVFLY DSLTGVPLV VSFSLKSDS
 APPWMVLAVL WCSMAQITLL PSFIWSCERY RADVRTVVEQ CVAIMSEEDG
 DDDGGDDYA EGRVCKVRFD ANGATPGSR DPAQVKLLPG RHMLFPPLER
 VHYLVPLSR RLSHDETNI STPREPGSFL HKWSSDDIR VLPQSRALG
 GPPEYLQQRH RLEDEDEEE AEGGLASLR QFLESGVLGS GGPGRPGPF
 FREINTTID ETPLPSTAS PGHSRRPRP LGLSPRRLSL GSPESRAVGL PLGLSAGRRC
 SLTGGEESAR AWGSGWPGN PIPQLITL

535 161214 Galanin Receptor NM_003614
 GalR3

A Homo sapiens

tccaggtgc ccgtctgatg ggggagatgg tgaigccagc aacatttacc tggacagacc agggaggtgg ggggcccgtg
 cagtgctgt ggtcttggc ctaattcc tgcctggcac agtgggacat gggcttgggc tggcagtgct cctgacagct
 gggccgagtg cctggcagga gccctggcagc accacggacc tgcattct caacctggcg gggctgacc tgccttcat
 cctgtgtgc gtgcttcc agggccaccat ctacacgtg gatgcttggc tcttggggc cctgtgtgc aagccgtgc
 accgtcat ctactacc atgtacgca gcagcttacc gctggctgt gtctccgtgg acaggtact ggcgtgtcgg
 caccagctgc gctcggcgc cctggcagc ccgggtaac ccggcgccg agtggggctg gttgtgtgc tggcgcgct
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 cgcgccggc cgccctggac gttggcact tgcctggcg ctactgtct cctgtgtgtg tgggtgagct ggccttaccg
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 cggcgggcg gcatgtgtg cgtgtggcg gcttactgc ctgtgtggc gtccggcagc cggcgagggc cggcgagggc
 ggttggcg cttgccttc agcccgccca cctagctgc ccgctggcg tacccttgc tggcttacc caactctgc
 ctcaaccgc tgcctacgc gctcgtcgc cgccattcc ggcggcgct ccggcgccg tggcggtgc ggcggcgag
 ctggcgag ggcggcg ccttggcg ccgtccccc gcttctcg gcccacccg ctggcccgga gacggcgccg
 ctggcgag gctgtgtgt ggtggcgcc agggcgccga gccaaggag ggaacccgtc acggcgagga ggtcggcgga
 ggacgggaat aaacctgccc gctggcact cgcctgt
 MADAQNISL SPGSVGAVAV PVVAFALFIL GTVNGNGLVLA VLLQPGPSAW
 QEPGSTTDLF ILNLA VADLC FILCCVPFQA ITYTLDWLF GALVCKAVHL
 LLYLTMYASS FTLAAVSVD R YLAVRHPLRS RALRTPRNAR AA VGLVWLLA
 ALFSAPYLS YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV
 SLAYGRTLRF LWAAVGPAGA AAAEARRRAT GRGRAMLAV AALYALCWGP
 HHALLCFWY GRFAFSPATY ACRASHCLA YANSCLNPLV YALASRHFRA
 RFRRLWPCGR RRRHRARRAL RRVRPASSGP PGCPGDARPS GRLLAGGGQG
 PEPREGPVHG GEARGPE

536 161214 Galanin Receptor NP_003605.1
 GalR3

P Homo sapiens

537 161221 Urotensin-II Receptor (GPR14)

A Homo sapiens

atggcgctga ccccgagtc cccgagcagc ttccctgggc tggccggcac cggcagctct gttccggagc cgcctggcg
 ccccaacga accctcaaca gctcttgggc cagcccgacc gggccagct ccttgggagga ccttggggc agggcgaca
 ttgggactct gctgtcgcc atggcggtg tggcggtgt gggcaacgoc taccagctgg tggcacttg cgcctcccg
 cgtgggtgg cctcaltga cgtctacgtg gtaacatgg cgttggcgga cgtgtgtac cttgtcagca tcccttcat
 cgttggccacc taccgacga aggagtgga cttggggag gttggcgcc ggtgtgtct cggccttggac ttcttgaaca
 tgcagggcag cacttacc ctagaccga tggagcagga ggttactgct ggcgtgtct ggcggcttggga caccgttgcag
 cggcccaagg gctaccgaa gctgttggcg ctggggcact ggtcttggc gcttggcg accgttggc tgalgttggc
 caltgggtgt gttggcgagg gttccaggg cttgtgtctg cccgcttggg gttccggcg ccaacggcg taccgttgc
 tgccttgc caccagcag cggggggccg ggttcttcat cgggtgtct taccggcg tggccggcg ctaccggcg
 tgcagcgcg ccttctcaa gtcggggccg cggcgggggc cgtcgcgct gttggcgatg cttgtgtct

538	161221	Urotensin-II Receptor (GPR14)	NP_061822.1	P	Homo sapiens
<p>ctgggctgctg ttcctgcoct tctggctgctg gcagctgctc gccagctaac accaggccccc gctggcgccg cggagcgccg gcatgcaaa ctaccgacc accctgcca ctacggcaa cagctggccc aacccttcc tctacgct gctcaccagg aactaccgg accacttgg cggcgccgctg cggggccccc gccagcgccgg aggcgggggg cccgttcoct cctcgacc ccggcccgcc ttccagcgc gttggggccg cttctgct tctcgacc caccggccac tgcagccctc gttcgggccc cagcgccccc ggccgacct ggcccgagg gttccaggcc cccggcgta MALITESPSS FPLAATGSS VPEPPGGPNA TLNSSWASPT EPSSLEDLVA TGTGTLLSA MGVVGVVUNA YTLVVTCSR LRAVASMYYV VNLALADLLY LLSIPFIVAT YVTKWEHFGD VGCRLVGLD FLTMHASIFT LTVMSERYA AVLRPLDTVQ RPKGYRLLA LGTWLLALL TLPVMLAMRL VRRGPKSLCL PAWGPRAHRA YLTLLFATSI AGPLLIGLL YARLARAYRR SQRASFRRAR RPGARALRV LGIVLFWAC FLPEWLWQLL AQYHQAPLAP RTARIVNYLT TCLTYGNSCA NPFLYTLTR NYRDHLGRV RGPSSGGGRG VPVSLQPRAR FORCSGRSL SCSQPTDSL VLAPAAPARP APEGPRAPA atggcttgca atggcagctg gccaggggg catttgacc ctgaggact gaactgact gacgaggcac tgaactcaa gtactgggg cccagcaga cagagctgtt catgccatc tctgcaat accctgct cttcgctggg ggcgctggg gcaatgggt gactgctg gcatcttc gccacaagg cagcgccag ctiacaact actactct cagccggcc gttcggacc tctggtgt gctgggggg cggccctgg agctatga gttgtggac aactacct tctgctggg cgttgggg tctattcc gcagctact gttgagtg gttcgctgg cctcagct caactgact gctctgagcg tggaaagcta tttggccgg gtgcaccac tccagccag gttcattgg accggggccc atgtggccg agtgcctggg ggcgctggg gttcgccat gttctgtccc cttgccaa caagcttgca cggcatccgg cagctgcac tggccggccg ggggccagtg ccagactcag ctgttgcat ctgtgtccg ccacggggcc tctacaat ggtatgtcag accaccggc tgtcttctt ctgctggccc atggcca tgaagtgct ctactgctc attggctg cactggggc gggagaggctg ctgctalc aggaaggcaa gggcaggggg tctgcagcag ccaggctcag ataccctgc aggtctcagc agcagatcg ggggcgga caagtgacca agatgctgt tttccctgct gttgtgttg gcatctctg gggcccgct cagcgccacc gctcatg gtagctg tccagtgga cagatggct gcaactggcc ttccagcag tgcacgtcat ctccggcatc ttcttacc tgggctggc ggccaacccc gttcttata gctcaltgc cagccgcttc cgaagagact tccaggaggc cctgtgctc ggggctgt gcatcgct cagacccggc cagactccc acagctcag caggatgacc acaggcagca ccctgtgta tttggggctcc ctggcgagct gggtccacc cttggctggg aagatggcc cagaggcgca gcaagagacc gatcactct ga</p>					
539	161249	G Protein- Coupled Receptor GPR66	NM_006056	A	Homo sapiens
<p>MACNGSAARG HFDPEDNLT DEALRLKYLQ PQQTELFMPI CATYLLIFVV GAVGNGLTCL VLRHKAMRT PTNYLFLSLA VSDLLVLL VG LPLELYEMWH NYPFLGVGG CYFRILLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV TRAHVRRVLG AVWGLAMLS LPNTSLHGIR QLHVPCRGPV PDSA VCMLVR PRALYNMVVQ TTALLFFCLP MAIMSVLYLL IGLRLRRERL LLMQEAKGRG SAAARSRYTC RLQHDRGRR QVTKMLFVL VVFGICWAPF HADRVMWSVV SQWTDGLHLA FQHVHVISGI FFYLSAANP VLYSLMSSRF RETFQEALCL GACCHRLRPR HSSHLSLRMT TGSTLCDVGS LGSVWHPLAG NDGPEAQQET DPS atggcaacc ttgcaaaa cactgaaca ttcaagatgg gttagaagac taccagact gctgagatt actgaatg cactaatg aatltcaat actccctta tgcacaacc tatatctca tatcttacc tggctctcg gtaacagtg cagcttgg ggtctctg cgtctatca gcaagaaaaa taagccatc atttcaiga tcaactctc tttggctgac ctgtctatg tatatctt</p>					
540	161249	G Protein- Coupled Receptor GPR66	NP_006047.1	P	Homo sapiens
541	161251	Purinergic Receptor P2Y10	NM_014499	A	Homo sapiens

accctccgg atttactt acaatagcca ccaciggcct ttacagagag cccttggct gcctggctt tacttgaagt atctcaat
 gtaagcagc atttggctc tgaagtgcat cagtgctta aggtgcttt ttctctcaa gcccctcagg gccagagact ggaagcgtag
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 caagctg cttgctt gttcaatc ttattct tttgcttca gtttggc accaatc ccgcatggc agttctgga
 ccgctccg cttatgagc aaggagagc gttatcaat gattgctaa
 MANLDKYTET FKMGSNSTST AEIYCNVTNV KFOYSLYATT YLIFPGLL P Homo sapiens
 ANSAALWVLC FRIKKNKAI IFMINLSVAD LAHVLSPLR IYYISHHWP
 FQALCLLCF YLKYLNMYAS ICFCTCISLQ RCFLLKPR ARDWKRRYDV
 GISAAIWV GTACLPFPL RSTDLNNKS CFADLGKQM NAVALVGMIT
 VAELAGFVP VIIAWCTWK TTISLRQPPM AFOGISERQK ALRMVEMCAA
 VFFICTPYH INEFTYMK ETIISCPV RIALYFHPFC LCLASLCLL DPILYFPMAS
 EFRDQSRHG SSVTRSLMS KESGSMIG
 MATTSATSTV NTSSLATTMT TNFTSLTSV VTIIASLVS TNSSEYDD P Equine herpesvirus 2
 LDDVDYEESA PCYKSDITRL AAQVVPALYL LVFLGLGN ILVIVIRY
 MKIKNLTNML LLNLASDLL FLTLFPWMH YIGMYHDWTF GISLKLRLG
 VCYMSLSQV FCILLTVDR YLAVVAVTA LRFRVTCGI VTCVCTWFLA
 GLLSLPEFF HGHQDDNRRV QCDPYPEMS TNVWRAHVA KVMLSLILP
 LLIMAVCVYV IIRLLRRPS KKKYKARLI FVMVAYFV WTPYNVILL
 STFHTLLNL QCALSSNLDL ALLITKTAVY THCCINPVY AFVGEKFRH
 LYHFFHTYVA IYLCYIPEL SGDGEKGP TRI
 gcgagaacc cgaatgacc gggccacggc ggtcccca cctgcccgt cctgagggc ggcctggct ccgggcaac
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 taatgctt gaaatgctt gaaatgctt gaaatgctt gaaatgctt gaaatgctt gaaatgctt gaaatgctt
 caacccca atctgctt gttgataa gaaatgctt gttgataa gaaatgctt gttgataa gaaatgctt gttgataa
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 ccatgagctt gttatgac ttacagat ggggagat ggggagat ggggagat ggggagat ggggagat ggggagat

542 161251 Purinergic Receptor P2Y10 NP_055314.1

543 161293 G Protein-Coupled Receptor Ls161293 [Herpes virus] NP_042597.1

544 177147 Neuromedin K Receptor-Like (NK-4R) NM_006679

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545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	<p>ttaataat taaataatc atgaaaaat</p> <p>MASPAAGNLSA WPGWGWPpppA ALRNLTSsPA PTASpSPAPs WTPSPRPpA HPPfLOppWAV ALWSLAYGAV VAVAVLGNLV VIVIVLAHKR MRTVtNSfLV NLAfADAAMA ALNALVNFY ALHGEWYFGA NYCRfQNfFFP ITAVfASIYS MTAJAVDRYM AIDPLKpRL SATATRIVIG SIWILAFLLA FPQCfLYSKIK VMPGRfTLcyV QWPEGRQRHF TYHMIvIVLV YCFPLLMGI TYTIVGfITLW GGEIPGDfTCD KYQEQLKAKR KVVKNMfIVV VTAfCWLPY HYfILTAY QQfLNRWKYIQ QVYLASFwLA MSSTMYNPfI YCCLNKRfRA GFKAfRWCP FIHVSSYDEL ELKATRLHPM RQSSLYTVTR MESMSVfVfDS NDGDSARSSH QKRGfTRDVG SNVCSRRNSK STSTfASfVS SShMSVVEEGS</p>	P	Homo sapiens
546	177168	Cysteinyll Leukotriene CYSLTf Receptor	NM_006639	<p>atggatgaac caggaaatct gacagtaict tctgocacat gccatgacac taattgatc ttccgaac aagtgtatc cacttgatc tctatgact ctgttgagg cttctggc aatggcttg tgcctatgt cctcaaaa accatacaca aagaatgacg cttccagta taccatgata attagcagt agcagaicia cttgtgtgt gcaacatgc ctcctgtgtg gctatattg ttacaaaagg caittgctc ttgttgact tcttgctcg cctcagcacc tatgtctgt atgcaacct ctattgagc atctctta tgcagoccat ggccttttc cgg'gcatlg caattgttt tccagtcocag aacattaat tggttacaca gaanaagcc aggtttgtgt gttgaggat tggatttt gtgatttga ccagtctcc attctaatg gccaaaccac aaaaagatga gaanaaat accaaggtct ttgagccccc acaaagacaat caaaiaaaa acaigtgtt ggctgtgcat tatgtgtcat tgtttgttg cttatcatc ctttgtta tataatgt ctgttacaca atgactattt tgccttact aaaaaataa atgaaaaaa atctgtcaag tcaataaag gctataggaa tgaatgtgt cgtgcacgct gcccttttag tcaattcat gccatacat attcaagta ccatcact tcatittta cacaatgaac ctacacccctg tgattctgt cttagaatgc agaatgcctt ggataaac tttctctgg ctgatacaa ttgtgtctt gacctctcc tatattct ttctgggggt aactttaga aaaggctgtc tacattcaga aagcattctt tgtccagctg gactatgta cccagaaaga aggcctctt ggcagaanaa ggaagaaga taigtatagt atag</p> <p>MDEtGNLTVS SATCHDTIDD FRNQVYSTLY SMISVVGfFG NGfVLYVLIK TYHKKSafQV YMINLAVADL LCVCTfPLRV VYVYHKGIWL FGDFLCRLST YALVYNLYCS fFMTAMsFF RCIAfVPVQ NINLVtQKKA RFVCVGIWfF VILTSSPFLM AKPQKDEKNN TKCFEPpQDN QTKNHVLVLH YVSLFVGfIL PFVfIIVCYT MILTLKKs MKKNLSHKK AIGMMVVTa AFLVSfMPYH IQRTfHLHfL HNETKPCDSV LRMQKSvVIT LSLAASNCfF DPLLYfFFSGG NfRKRLSTfR KHSLSSTVTV PRKASLPEK GEEICKV</p>	A	Homo sapiens
547	177168	Cysteinyll Leukotriene CYSLTf Receptor	NP_006630.1	<p>ccacgcctc gccggctgca cggctgcacc ggcagcggct caggctcgg cctctcccg gctgcagcag cgcgcctgcc ggccccactg ggctggatc cggcccgccg cccctcgcca cgcctgtctc tggcccccgg cccggcccg cggacactgc gctggcgcc cccaggggaa accgacccg gccagggcc cgaagaagc aggcctcccg gccggggcc ctcggcgcc ccagctctc ggccggcgcc ctggcccgcc tccggagcc gctgagcct gggggggccat ggaagcgccg ccggccgaag ggccgctga cgttcgggg gctggcgcc gcatgcggc ggccggcgcc gggggcgcc gcttcggc agccctggacc ggggctcgg ccgcgctat ggctgtctc atcgtggcca cggctgtgg caacgcctg gctatgctg ccttcgtggc cgactgagc ctccgcaacc agaaactt cttcgtct aactcgcca tctccactt cctcgtggc gctcttga tccacttga tgaacctac gttgtgacag gccgtggac cttcgcccg ggccttga agctgtgctt ggtatggac taacctgtt gcaactctc tgcctcaac atcgttca tcaatgaca cggcttgc tgggtaccc gagcggtctc ataccggcc cagcagggg acacggcgcc ggcatgtcgg aagatgtctc tgggtgggg gctggccttc ctgcgtacg gaccagccat cctgagctgg gattacctgt cggggggcag cttccatccc gagggccact gctatggcca gttcttctac</p>	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232	<p>ccacgcctc gccggctgca cggctgcacc ggcagcggct caggctcgg cctctcccg gctgcagcag cgcgcctgcc ggccccactg ggctggatc cggcccgccg cccctcgcca cgcctgtctc tggcccccgg cccggcccg cggacactgc gctggcgcc cccaggggaa accgacccg gccagggcc cgaagaagc aggcctcccg gccggggcc ctcggcgcc ccagctctc ggccggcgcc ctggcccgcc tccggagcc gctgagcct gggggggccat ggaagcgccg ccggccgaag ggccgctga cgttcgggg gctggcgcc gcatgcggc ggccggcgcc gggggcgcc gcttcggc agccctggacc ggggctcgg ccgcgctat ggctgtctc atcgtggcca cggctgtgg caacgcctg gctatgctg ccttcgtggc cgactgagc ctccgcaacc agaaactt cttcgtct aactcgcca tctccactt cctcgtggc gctcttga tccacttga tgaacctac gttgtgacag gccgtggac cttcgcccg ggccttga agctgtgctt ggtatggac taacctgtt gcaactctc tgcctcaac atcgttca tcaatgaca cggcttgc tgggtaccc gagcggtctc ataccggcc cagcagggg acacggcgcc ggcatgtcgg aagatgtctc tgggtgggg gctggccttc ctgcgtacg gaccagccat cctgagctgg gattacctgt cggggggcag cttccatccc gagggccact gctatggcca gttcttctac</p>	A	Homo sapiens

aactgggaact tctatcaac ggccttccacc ctggaggttct ttacggcctt cctcagcgtc accttttta acctcagcat ctacctgaac
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aaaaaaaaa aaaaaaa

549 177191 Histamine H3 Receptor NP_009163.1 P Homo sapiens
MERAPDGPL NASGALAGDA AAAGGARGFS AAWTAVLAAL MALLJATVL
GNALVMLAFV ADSSLRTQNN FFLNLAISD FLVGAFCLP YVPYVLTGRW
TFGRGLCKLW LVVDYLLCTS SAFNVLISY DRFLSVTRAV SYRAQQGDTR
RAVRKMLLVW VLAFLYGA ILSWEYLSGG SSPEGHCA EFFYNWYFLI
TASTLEFTP FLSVTFNLS IYLNQRRTR LRLDGAREAA GPPEPEAQP SPPTPGCWG
CWQKGHGEAM PLHYGVGEA AVGAEGEAT LGGGGGGGSV ASPTSSSGSS
SRGTERPRSL KRSGKPSASS ASLEKRMKMV QSQTQRFRL SRDRKVAKSL
AVVSIFGLC WAPYTLML RAACHGHCV P DYWYTSFWL LWANSAVNPV
LYPLCHHSR RAFTKLLCPQ KLIKPHSSL EHCWK

550 177387 G Protein-Coupled Receptor ORF4 NM_020155 A Homo sapiens
agcggcgtt gctcagacc gacgggatac agcggctt cccctccac cccagagcaga calgaagac cgaaggcagg
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552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>ctcttaaa ttcttcta ggaigtac ttcttcca caatgaatga ggtcacat gacaagcaca tggactttt ttataatgg agcaacatg atactgtga tgcgtggaca ggaacaaagc ttgtatgt ttgtgtgt gggacgttt tctgcctgt tattttt tctaatttc tggctatgc ggcagtgatc aaaaacagaa aatttcatt cccctctac taccgttgg ctatttagc tgcgcgat ttctgcgt gaaatgctta tgtttccg algttaaca caggccaggt tcaaaaact ttagactga accgttgtt tctcgtcag ggctcttgg acagtgtt gactgttcc ctacaaact tctgtgtat cgcgtggag aggcacatgt caatcatgag ggtcgggtc catagcaacc tgaacaaaaa gagggtgaca ctgtcaatt tgcctgtct gggcaltgcc attttatgg ggcggtccc cacatgggc tggatggc tctgaacat ctctgctgc tctccctgg ccccattha cagcaggaggt tacctgtt tctggacagt gtcaaatc agggcttc tcatatgt tgtgtgtac ctgggtact acgtgtact caagagga accaactgt tgtctcgca tacaatggg tccatagcc gccggagagc accatagag ctatagaa cgggtgtgac tcttttagg gcgttttgg tatctggac cccggggctg gtgtgtctgc tctcgtacgg cctgaactgc aggcaggtg gcgtcagca tgtgaaagg tggttctgc tgcctgcgt gctcaactc gtcgtgaacc ccatcatcta ctctacaag gacgggaca tgtatggac catgaagag algtctct gcttcttca ggaagaacca gtagaggtc cctctgcat ccccccaca gtctcagca gtagtgac agcagocag tacaagagg atagtattag ccaagggtga gcttgcata aaagcactc cttaactcg gtagctctc ggccaccca ggtgatgact gcttagg MNECHYDKHM DFFYNRSNTD TVDDWTGTLKLVVLCVGTFF CLIFFSNSL VIAA VIKNRK FHPFYLLA NLAAADFFAG IAYVFLMFT GPVSKTLTVN RWFLRQGLLD SSLTASLTNL LVIAVERHMS IMRMRVHSNL TKRVTLIL LVWAIAIFMG AVPTLGNWCL CNISACSSLA PIYSRSLVF WTVSNLMAFL IMVVYLRIY VYVKRKTNVL SPHTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQCQ VQHVKRWFLL LALLNSVNP IYSYKDEDM YGTMKKMICC FSQENPERR SRPSTVLSR SDTGSQYIED SISQAVCNK STS atggccccc ggaaggcgt gctggcgggt ctctggga tggtagtgc cgtggcgtc ctatcaacg cactgtgt gctttgtgc gctacagcg ctgagctcg cactcagcg tgcgtgggt gtagcgcg cggacacogt cggcgcccg cgtatggcaa tgcgtggcg gctggatg ccttcagc tgcctgggt gtagcgcg cggacacogt cggcgcccg cgtatggcaa gtaatggct tcttggcac ctcttggcg tcaacggcg cgtgtgggt gtagcgcg agcgagac agtggctggc agtgggttc ccactgct agcccgagc ccttggacg cgtatggcg gctctgtct gggctgtgccc tggggacagt cgttggctt ctatggcgt gctatgggt gcttgggt tggctacag agcgcttgc cgtctgtc gctgtcctg ccggccagc ctgagctcc gcgttgcg ccaogtcca tgcgtggcg ttcgtgtgc cgtgtgcgt gcttgcctc acctgtcc aggtgtacog ggtgtgacgc agacatgac agcgatgga cao-gtcaac atgaatggcg</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>atggccccc ggaaggcgt gctggcgggt ctctggga tggtagtgc cgtggcgtc ctatcaacg cactgtgt gctttgtgc gctacagcg ctgagctcg cactcagcg tgcgtgggt gtagcgcg cggacacogt cggcgcccg cgtatggcaa tgcgtggcg gctggatg ccttcagc tgcctgggt gtagcgcg cggacacogt cggcgcccg cgtatggcaa gtaatggct tcttggcac ctcttggcg tcaacggcg cgtgtgggt gtagcgcg agcgagac agtggctggc agtgggttc ccactgct agcccgagc ccttggacg cgtatggcg gctctgtct gggctgtgccc tggggacagt cgttggctt ctatggcgt gctatgggt gcttgggt tggctacag agcgcttgc cgtctgtc gctgtcctg ccggccagc ctgagctcc gcgttgcg ccaogtcca tgcgtggcg ttcgtgtgc cgtgtgcgt gcttgcctc acctgtcc aggtgtacog ggtgtgacgc agacatgac agcgatgga cao-gtcaac atgaatggcg</p>	P	Homo sapiens
554	189873	G Protein- Coupled Receptor GPR78	AF411107	<p>atggccccc ggaaggcgt gctggcgggt ctctggga tggtagtgc cgtggcgtc ctatcaacg cactgtgt gctttgtgc gctacagcg ctgagctcg cactcagcg tgcgtgggt gtagcgcg cggacacogt cggcgcccg cgtatggcaa tgcgtggcg gctggatg ccttcagc tgcctgggt gtagcgcg cggacacogt cggcgcccg cgtatggcaa gtaatggct tcttggcac ctcttggcg tcaacggcg cgtgtgggt gtagcgcg agcgagac agtggctggc agtgggttc ccactgct agcccgagc ccttggacg cgtatggcg gctctgtct gggctgtgccc tggggacagt cgttggctt ctatggcgt gctatgggt gcttgggt tggctacag agcgcttgc cgtctgtc gctgtcctg ccggccagc ctgagctcc gcgttgcg ccaogtcca tgcgtggcg ttcgtgtgc cgtgtgcgt gcttgcctc acctgtcc aggtgtacog ggtgtgacgc agacatgac agcgatgga cao-gtcaac atgaatggcg</p>	A	Homo sapiens

555	189873	G Protein- Coupled Receptor GPR78	CAC34041.1	P	Homo sapiens	<p>tcgcgcgtct cgcgcaccctg caccaccatg tgccgcacgg ctgcctcctc cagcagaagc ggcgcgcgca cgcgcgcacc aggaaatg tgcatgtat tgcgacctc ctcatctgt ttgccccgla tgcatagacc aggcctggcgg agctcgtgccc cttcgtacc gtagcggcc agtggggcat cctcagcaag tgcctgacct acagcagggc ggtggccggac ccgttcacgt actctcgtc cgcgcggccg ttccgcgaag tccggccgg catggctgac cggctcgtga agagaaacccc gcgcaccga tcaccatg acagctctct ggatggcc ggcattggcc accagctgt gaaagaaac ccgcgcacag cgtccacca caacgctct gtagacag agaatgatt cgtcgtcag cagacact ga</p> <p>MGPGHALLAGLLVMVLAVALLSNALVLLCCAYSALRTRA SGVLLVNLSL GHLLAALDMPTLLGVMRGRTPSAPGACQVIGFLDTFLA SNAALSVAAL SADQWLAVGFPLRYAGRLRP:RYAGLLGCAWGQSLAFSGAALGCSWLGY SAFASCSRLRPPEPRRFAAFTATLHVG FVLPLAVLCL TSLQVHRVAR RHCQMDTMTAKALALLADLHPSVRQRLIQKRRHRATRKIGIAIATF LICFAPYVMTRLAELVPFVTVNAQWGLSKCLTYSKAVADPFTYSLRRP FRQVLGMMVHRLKRTPRPA STDSSLDVA GMVHQLLKRTPRPASTHNGS VDTENDSCLQ QTH</p>
556	189874	Neuromedin U Receptor 2	NM_020167	A	Homo sapiens	<p>atggaaaac ttcaaatg ttctggatc taccagaga aactagaaga tccattccag aaacacctga acagcacga ggagatctg gccctctct ggcgacctg gcgcagccac ttctctcc ccgtgtctgt gggtatgig ccaatttg ttgtgggggt cattggcaat gtccgtgtgt gcttggtat tctgcagcac caggctatga agacgcccac caactactac ctctcagcc tgccgtctc tgacctccg cctcgtctc ttggaaagcc cctggaggtc tatgagatgt ggcgcaacta cctctcttg tcggggccg tggctcgtc ctcaagagc gccctcttg agaccgttg ctgcctcc atctcagca taccacogt cagctggag cgtacgtgg ccaactaca ccgttccg gccaaactg agagcacccg gcgcggggcc ctacggatcc tcggcatctg ctggggctc tccgtctct tctccgccc caacacagc atccatggca tcaagtcca ctactccc aatgggtccc ttggtccagg ttggccacc tgaaggtca tcaagccat gtagatcac aatttcalca tccagtcac ctctctcta ttctacccc tcccatgac tgcatagt gtctctact acctatggc actcagata aagaagaca aatctctga ggcaatgaa gggaatgcaa atatcaaa accctgcaga aaatcagica acaagatct gttgtctg gtctatgt ttgtatctg ttggccccc ttccatctg accgactct ctacgttt ggagggagt ggagtaatc cctggctgct gtttcaacc tcttcaatgt gggtcaggt gtctctct acctgagctc agcgtgaac cccattatct alaaactat gttctgccc ttccagggcag catccagaa tgtgatct tcttccaca aacagtggca ctccagcat gacccagt tgcacctgc ccagcggaaac atctctga cagaaigcca cttgggag ctgaccgaag atataggct ccaattcca tgcagtcat ccagcacaa ctctacctc ccaacagccc tctctaga acagatga agacaact atcaagctt ccaactaac aaaactga</p> <p>MEKLQNASWIYQKLEDPFQKHLNSTEYL AFLCGPRRSHFFLPVSVVV PFVVGIGNVLVCLVILQH QAMKTPTNVYLFSLAVSDLLVLLGMPLV YEMWRNYPFLFGPVGYFKTALFETVCFASLSITTVSVE RYVAILHPFR AKLQSTRRA LRILGIVWGF SVLFLPNTS IHGKFHYFPNGSLVPGSAT CTVTKPMWY NFIIQVTSFLFYLLPMTVIS VLYLMLALRLKKDKSLEADE GNANTQPCPKSVNKMFLVL VLVFAICWAPFHIDRLFFSFVEWSESAA VFNLVHVVS VFFYLSAVNPIYNLLSRR FQAAFQNVIS SFHKQWHSQH DPQLPPAQRNIFLTECHFVE LTEDIGPQFPQSSMHNHSLPTALSSEQMS RTNYQSFHFNKT</p>
557	189874	Neuromedin U Receptor 2	NP_064552.1	P	Homo sapiens	
558	189884	G Protein- Coupled Receptor	LG94108	A	Homo sapiens	<p>atgtggcag ctgccttg agacttaac tccagcaga tgaatgtc ctgtctac ctccactg ccggaggga cctgcctct gattccagg acggagaac catatccc gctctcttg tggctgtg cctgtgggc ttgtgggaa accgtgtgt</p>

Ls189884

P Homo sapiens

559 189884 G Protein-Coupled Receptor 67 Ls189884 ENSMPRT1140
MLAAAFADSN SSSMNVSAFH LHFAGGYLPS DSQDWRTIP ALLVAVCLVG
FVGNLCVIGI LLHNAWKGP SMHSLNL SLADLSLLF SAPIRATAYS
KSVWDLGWVF CKSSDWFIHT CMAAKSLTIV VVAKVCFMYA SDPAKQVSIH
NYTWSVLVA IWTVASLLPL PEWFFSTRH HEGVEMCLVD VPAVAEEFMS
MFGKLYPLLA FGLPLFFASF YFWRAYDQCK KRGTQNLNR NQIRSKQVTV
MLLSIAIISA LLWLPEWVAW LWVWHLKAAG PAPPOGFIAL SQVLMFSISS
ANPLIFLVMIS BEFREGLKGV WKWMITKKPP TVSESQETPA GNSEGLPDKV
PSPSPASIP EKEKPSPSPSS GKGTKEKAEI PILPDVVEQFW HERDTPVPSVQ DNDPIPWEHE
DQETGEGV

A Homo sapiens

560 189895 G Protein-Coupled Receptor 61 NM_031936
atggagttct caccatccc ccaagcatca ggggaactct ccaattggg gagggtctct caaacccag gtccctciac
tgccagtgagg gtccggagg tggggctacg ggaattgct toggaaatcg tggccctcti cttaatgct ctcgaggact
tgactgtctgt ggcctggcaat ggcgcgtgga tggccgtgat cgccaagacg cctgcctcc gaaatgtgt cttcgtctc
caccctggcc tgggtggaact gcctggctgccc ctgaacctca tgcctctggc calgtctctcc agccctggccc tcttgacca
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aagocacgtc cagaaggga gctgaggctg ctagccggg agggcttcat tgaagagzac ttccgcaggt tcttcagggg
gactggcgtg cctctgagt cctgggttcc ccgacoccta ccaagccoca agcaggagoc accgtcgtgt gacttccgaa
tcaggocag atag

P Homo

561 189895 G Protein-Coupled Receptor 61 NP_114142.1
MESSPIPQSS GNSSTLGRVP QTPGPSTASG VPEVGLRDVA SESVALFNL

		Coupled Receptor GPR61				LLDLTAVAGN AAVMAVI AKT PALRK FVEVF HCLVDLLAA LTLMLAMLS SPALFDHALF GEVACRLYLF LSVCEVSLAI LSVSAINVER XYVYVHPMRY EVRMTLGLVA SVLVGVVWKA LAMASVPVLG RVSWEEGAPS VPPHCSLQWS HSAYCQLFVV VFAVLYFLLP LLLILLVYCS MERVARVAAM PDGPLPTWME TPQRSELS SRSTMVTSSG APOTTPHRTF GGGKAAVVLL AVGGQFLLCW LPYFSHLVY ALSAQPISTG QVESVVTWIG YFCFTSNPFF YGCLNRQIRG ELSKQFVCF KPAPEEELRL PSREGSIEEN FLQLQGTGC PSESWVRSL PSPKQEPFAV DFRIQAR		
562	189900	Sphingolipid Receptor Edg8	NM_030760		A	atggagatcgg ggcgtgtcgg gccggcgccg gtagcgagg tcatgtcct gcatataac tacacggga agctccggcg tgcgcctac cagccggggtg ccggcctcgg ccggcagcc ggtgtgtggc tggcggtgtg cgtctcat ggtctaga atctagcgt gttgttggg ctggagagcc aocggcgctt ccaagctccc agtctcctg tctggcgag cctcaggtg tcggatctg tggcaggcg ccctacggc gccatctcc tactgtcggg gccgtctacg ctgaactgt ccccgcgct ctgtgtcgca cgggaggagg gcgtctgtt ggcactact gcgtccgtg tggcctct ggcctacgg ctggagcgca gctcacat ggccgaggg ggcccgcc ccgtctccag tccggggcg ccgtctggcg tggcagcgcc ggcctggggc ggtgtcgtg tctcgggt cctggcagcg ctgggctgga atgtctggg tggcctggag gctgtcca cgtctggc gctctacgg aaggctacg tgcctcgt cgtgtcgtc ttgtggggca tcttggcg gactgtgca ctctacggc gcatctatg ccaggtacg gccacggc ggccctggc ggacggccc ggactcggg ggacacatc gccggggcg cgtcgaaag ccgctcgtt ggcctgtgt ccgacgtca gcgtgtgtgt cctggctt ggtgcattt ggggccctt ctctcgtg cgtgtcgt acgtgggtg cccggcgcc accgtgtg tactctgca ggccgatccc ttctgggag tggccatgg caactact ctgaaccca tcatctac tcatctac cgtacatc cgtacgtg gccacgtgt cctggcgctg gtctgtcg gacccact ctggggcaga gcccgaggt gctccagca gtcggcgagc gcgcgtgagc ctccggggg cttgcgcgc tgcgtcccc cgggcttga tggagcttc agcagctcg agcgctcacc gccccagcg gacggcggtg acacaggg ctacaggg agcccggtg caccagcg ccggcgact cgtgtatcag aacggctcg agactga MESGLRPAP VSEVVLHYN YTGKLRGARY QPGAGLRADA VVCLAVCAFI VLENLAVLLV LGRHPRFAP MFLLGSLTL SDLLAGAAYA ANLLSGPLT LKLSPALWFA REGGVFVALT ASVLSLLAIA LERSLTMARR GPAPVSSRGR TLAMAAAAG VSLLLGLPA LGWNCLGRD ACSTVLPYA KAYVLCVLA FVGLAICA LYARIYQVR ANARLPARP GTAGTSTRA RRPRLALL RTL SVVLLAF VACWGPLFL LLLDVACPAR TCPVLLQADP FLGLAMANS LNPHYTLN RDLRHALLRL VCCGRHSCGR DPSGQQSAS AAEASGGLRR CLPPGLDGSF SCSSRSRQR DGLDTSSTG SPGAPTAART LVSEPAAD		Homo sapiens
563	189900	Sphingolipid Receptor Edg8	NP_110387.1		P	gtttaggcac cgtgtcgtg cctgtctct ccaggcgaga gcggcgagc cctacccc acagcgctg agccctgcag ctggccctca gccctgggag gactctct ttccagaga gactcggcc tgcacttca gcttccat ggcctcgcc ttctagagg cctcccgga gcgcactg ctggagggtt ggtaggagt ctcgtcct actgggctt gccggccccg cgttagggcc agcaaggccc ggcctgtgtt gaggaggtt ggcctagaga agcagtagag cagcggggtc aggaactgt tgaagaggt gaaaggcagg gaggctgtgt gcaagggt accggatcggc agggcgagac ccaagaagcc acctggag ccatgccaaa gtagtctgt gcaaggag agatgtgt gacggccacc acctggcca gacacgtat ggccctctg ggccctgt ccccgccag accaggtt cggatgtgt gccaatgt cacaataga aagagatga gcgccagtg caggaaagac tccagcaggt acatgtctg gtccagcggg agcgaggcg agggctctgt gccacctg tagcttagc aggaaggccc ggagagaggt cttagagca ggtgcccgtt ggaggcaggt atgcccacc agatctcccc		Homo sapiens
564	189901	G Protein- Coupled Receptor Ls189901 (HEOAS4)	LG94029		A	gtttaggcac cgtgtcgtg cctgtctct ccaggcgaga gcggcgagc cctacccc acagcgctg agccctgcag ctggccctca gccctgggag gactctct ttccagaga gactcggcc tgcacttca gcttccat ggcctcgcc ttctagagg cctcccgga gcgcactg ctggagggtt ggtaggagt ctcgtcct actgggctt gccggccccg cgttagggcc agcaaggccc ggcctgtgtt gaggaggtt ggcctagaga agcagtagag cagcggggtc aggaactgt tgaagaggt gaaaggcagg gaggctgtgt gcaagggt accggatcggc agggcgagac ccaagaagcc acctggag ccatgccaaa gtagtctgt gcaaggag agatgtgt gacggccacc acctggcca gacacgtat ggccctctg ggccctgt ccccgccag accaggtt cggatgtgt gccaatgt cacaataga aagagatga gcgccagtg caggaaagac tccagcaggt acatgtctg gtccagcggg agcgaggcg agggctctgt gccacctg tagcttagc aggaaggccc ggagagaggt cttagagca ggtgcccgtt ggaggcaggt atgcccacc agatctcccc		Homo sapiens

565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	<p>ggccaccogg gcaactgccc ccacggagac agggctcagc acgtgggggg scigcaccac cttcaggtag cgggtgagtg cgaatggctg gaggagagaca acgtggccg tgcgtgtgtt ggcacagcag aagaggttga ctttcaggc agcagcccca aagcgccagg tctatgtag gaggtagtag tccacggga gggcgaggtt gctgatcagg aggaagttag cggccacag gtgacagtg aacacgtgtt tggaggttca gggccggg tggagtaga agatgaagag ggcacacttg ttcccacca ggccacagac aaactcagg gcaaggttg gtgcaggga ggcagacac agcagaagag aggtggggg gcaaggccct cagaggacc cccacagat ggtaagagc</p> <p>MELHNLSSPS PSLSSSVLPP SFSPSPSSAP SAFTTVGGSS GGPCHPTSSS LVSAFLAPIL ALEFVLGLVG NSLAFICHTRPWTSNTV FLVSLVAADF LLISNLPLRV DYLLHETWR FGAAACKVNL FMLSTNRTAS VVELTALAN RYLKVVQPHH VLSRASVGAA ARVAGGLWVG ILLNGHLL STFGSPSCLS YRVGTPKSAS LRWHOALYLL EFFLPLALIL FAIVSIGLTI RNRGLGGQAG PQRAMRVLAM VVAVYTICFL PSIFGMASM VAFWLSACRS LDLCTQLFHG SLAFTYLSV LDPVLYCFSS PNFLHQSRAL LGLTRGRQGP VDESSYQPS RQWRYREASR KAEFIGKLKV QGEVSLEKEG SSQG</p>	P	Homo sapiens
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	<p>gggtatggt taactcagca gaattgttg aacactacg acatgctggg gatcatggca tggatggca cttgcaaaa ctggctggca gcagagggcg cctgggaaa gtaactct tccatttt atgggttga gtgctgttg gggagcttg gaaataccat tgtgtttac ggtatcatct tctcttgaa gaactggac agcagtaata ttatcttt taactctct gctctgact tagctttct gtgcaccctc cccatgctga taaagggtia tggcaatgga aactggatat atggagactg gctctgcala agcaaccgat atgtgttca tggcaactc talaccaga tctcttct cactttatc agcatagatc gatactgat aataagiat ccttccgag aacactct gcaaaagaa gagtgttga tttaactc ctggccat tgggtttag taacttga gtaactcc alactccc ttaaatcc tttataact gacaaatgga ccaactgaa tgaattgca agcttgtag accccaacta caactcatt taacagatg gttaaacact gttggggtc cttaactc ttgttgtat gttgttcti tatiacaaga tigtctcti cctaaagcag aggaataggc aggtgtctac tgcctgccc ctgaaagc cttcaact ggtatcatg gcagtggttaa tctctctgt gcttttaca cccatcag tcatgggaa tggtaggac gcttcagcc tggggagtg gaaacagiat cagtgcaact aggtgtgcat caactctt taacttga cagggctt ggccttctg aacagtgta tcaacctgt cttatttt ctttgggag atcactcag ggcactgctg atgaataac tgaagacaca cttcaatcc cttaactct ttacagatg ggctcagaa cttcactti cattcagaa aaagtgaggg gcttgtaaa cagattgtc taacatgaa tctgtaagcc agttacagt tgccttaact calagacatc aatcagagag tgcacagat ttaacttga tctaaagaca agttgaccc agagtatg aaaaagatgg gacgacaaga atgactgtgt tttctctct aagaatgaa aggaatgaa ctgcttga tttgggca ttaactcaaa atactagga gtaaaagct ttctcaata gtgcaaaaat ggaagatata taagcaaca agttgtcgc attgatcac tggcagat gtcaaaaaa aaaaaaaa</p> <p>MAWNATCKNW LAEAAALEKY YLSIFY GIEF VVGVLGNTIV VYGYFSLKN WNSSNYLFN LSVSDLAFLC TPLMJRSYA NGNWYGDVL CISNRYVLHA NLYTSILFT FISIDRYLII KYPREHLLQ KKEFALISL AIWVLVTLEL LPILPLINPV ITDNGTTCND FASSGDPNYN LIYSMCLTL GLPLFVMC FFYKIALFL KQRNRQVATA LPEKPLNLV IMAVVIFSVL FTYHYVMRNV RIASRLGSKW QYQCTQVVIN SFYIVTRPLA FLNSVINPVF YFLLGDHFRD MLMNQLRHNF KSLTSFRWA HELLSFREK</p>	P	Homo sapiens
568	189920	G Protein- Coupled Receptor GPR63 (PSP24)	NM_030784	<p>tggagccatg cttccggcg tcttcggcg gcgcggcg gctgccttc gcttgaagca aaagactct tgtgaagat ggaaactcat gttcaatgat ttccagccc atcaatggga cttgatactg ctgtcttg tgaatgct tgaagaactc ctgcactct gcttgctatc tccatctac tgaataccatg gcttctcgg caggttgtag tgcgttcat accgggacat ccaacacac</p>	A	Homo sapiens

beta)		
569	189920 G Protein-Coupled Receptor GPR63 (PSP24 beta)	NP_110411.1 P Homo sapiens
570	189945 G Protein-Coupled Receptor Dj287g14.2	AK027843 A Homo sapiens

gcagggtatt ttggagatc gttttttc agaatggca ttttcaatg ggaatggg cagatctgg ggaagaaagg caagagaagc
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caagacatt accagctg gcttcacgg gggaggtg tattcagt
MDFESGQVDP LASVILPPNL LENLSPEDSV LVRRQAQTFIF NKTGLFQDVG P
PQRKTLVSYV MACSIGNITI QNLKDPVQIK IKHTRTQEVH HPICAFWDLN Homo
KNKSFGGWNT SGCVAHRDSD ASETVCLCNH FTHFGVLM DL PRSASQLDAR sapiens
NTKVLTFISY ICGSIAIFS AATLLTYVAF EKLRRDYP SK ILMNLSTALL FLNLLFLD LG
WTSFNVDGL CIAVAVLLHF FLLATFTWMG LEAHMYIAL VKVFNTYIRR
YLFKFCIGW GLPALVSVV LASRNNEVY GKESYGKEG DEFQWQDPV
IFYVTCAGYF GVMFFLNAM FIVVMVQJG RNGKRSNRTL REEVLRLRS
VVSLTFLLGM TWGFAFFAWG PLNIPFMYLF SIFNSLQGLF IFIFHCAMKE
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STYLSKSKS SSTTYFKRNS HTDNVSYEHS FNKSGSLRQC FHGQVLVKTG PC
caccatagg caaagatgt tttcttag agaatcagc ctgcataa cagctgacc agggcagag gagacaaatc
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Homo
sapiens

P

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Homo
sapiens

A

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Coupled Receptor
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190026

573

AF055084

G Protein-
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VLGR1

190031

574

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Homo
sapiens

P

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AAD55586.1

G Protein-
Coupled Receptor
VLGR1

190031

575

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GPR57

580 190188 G Protein- AB049405
Coupled Receptor
LGR6

A Homo
sapiens

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[illegible]

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	MTSTCTNSTR ESNSSHTCMP LSKMPISLAH GIRSTVLVI FLAASFVGNV VLALVLQRPK P QLLOVNTNREI FNLLVTDLLQ ISLVAPWVVA TSVPLFWPLN SHFCTALVSL THLFAFASVN TIVLVSDRY LSIHPLSY SKMTQRRGYL LLYGTWIVAI LQSTPPLYGW GQAADFERNALCSMIWGASP SYTILSVVSF IVPLIVMIA CYSVVFCAAR RQHALLYNVK RHLSEVRVKD CVENEDEEGA EKKEEFQDES EFRRQHEGEV KAKEGRMEAK DGSLEKAKEGS TGTSESSVEA RGSEEVRESS TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMFEGEDDI NFESEDDVEAV NIPESLPPSR RNSNSNPPLP RCYQCKAAKV IFIIFSYVL SLGPYCFLAV LAVWVDVETQ VPQWVITIII WLFFLQCCIH PYVYGYMHKT IKKEIQDMLK KFFCKEKPPIK EDSDHDLPGT EGGTEGKIVP SYDSATFP taactgtcca ccagaaagga ctgctcttgg ggtgagtgga acctctcca ttatagaag aattgaagge tgaagaactc agcctctatc A atgigggaaca gctcigacgc caactcttcc tgcataccatg agctctgtct gggctatcgt taigtctcag tagctgggg gggtggtgtg gctgtgacag gcacgtgtgg caatgtgtct acctctacgt cctgtggcat ccagccaag ctctgtacc gattcaact gctatagoc aactacac tggctgtat cctctactgc acctctctc agcctctctc tctgtgacac taccctcac tgcactggog caocgtggc acctctgca gggatgtgg gctctctt ttgcttcca attctgtct catctgtac cttgtctca tgcacatggg acgtactc cttatggc acctaaact ttctccca gtttcagtg ccaaggggat agtgcgtgca ctgtgtgagca cctgggtgt gggcgtggcc agctgtgtc cctctggcc tattatct cttgtgtc tagctgtcac ctgtcgtt gacctacc gaggcggcc ttacacacc atctctatgg gcatctact tgtgtgtgg ctacagctg ttggtcatct ctatgtctc attcacggc aggtcaacg agcagacag gcatgtgacc aatacagt gctgacagga agcatcact ccaactatgt ggcagagact gctgagcca tgcctgtgtg ttccagagag ctgtgacgca ggttagatc aggaagagacc agtgaaggga tttcatctga gccagtcagt gctgtccaca ccagacctt ggaggggac tcatcagaag tgggagacca gattcaacgc aagagagcta agcagatgc aggaagaaag cctccagag catctgocaa agccacgcca attaaaggag ccagaaagag tccggattct tcatggaaat ttgggaaggt gactgaaag tttttgtgt tgtctctgt ctgtgtctg agctatcc cttctgtct gctcaacatt ctgtgtgcca ggtccaggc tcccggggt gtcacatgc ttgtgtccaa cctcacctgg ctcaatgtt gcatcaacc tgtgtctctat gcagccatga accgcaatt ccgccaagca tatgtctca tttaaaag agggcccg agttccata ggtctccatta gaactgtgac cctagtcc agaatcagg agctctct ctaggacca agtggocagg taataggaga ataggtagaa taacacatgt gggcatttt aciaaatct ctccagcc loccaaatca agctctcca tcatgtgac aatgttcag ccttagacgt ccaaggagt attaat attaaat gaattctgt cttaaaaa aaaaaaata aaaaaagaaa aaaaaataa aaaaaataa aaaaa	Homo sapiens
584	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NM_020370	taactgtcca ccagaaagga ctgctcttgg ggtgagtgga acctctcca ttatagaag aattgaagge tgaagaactc agcctctatc A atgigggaaca gctcigacgc caactcttcc tgcataccatg agctctgtct gggctatcgt taigtctcag tagctgggg gggtggtgtg gctgtgacag gcacgtgtgg caatgtgtct acctctacgt cctgtggcat ccagccaag ctctgtacc gattcaact gctatagoc aactacac tggctgtat cctctactgc acctctctc agcctctctc tctgtgacac taccctcac tgcactggog caocgtggc acctctgca gggatgtgg gctctctt ttgcttcca attctgtct catctgtac cttgtctca tgcacatggg acgtactc cttatggc acctaaact ttctccca gtttcagtg ccaaggggat agtgcgtgca ctgtgtgagca cctgggtgt gggcgtggcc agctgtgtc cctctggcc tattatct cttgtgtc tagctgtcac ctgtcgtt gacctacc gaggcggcc ttacacacc atctctatgg gcatctact tgtgtgtgg ctacagctg ttggtcatct ctatgtctc attcacggc aggtcaacg agcagacag gcatgtgacc aatacagt gctgacagga agcatcact ccaactatgt ggcagagact gctgagcca tgcctgtgtg ttccagagag ctgtgacgca ggttagatc aggaagagacc agtgaaggga tttcatctga gccagtcagt gctgtccaca ccagacctt ggaggggac tcatcagaag tgggagacca gattcaacgc aagagagcta agcagatgc aggaagaaag cctccagag catctgocaa agccacgcca attaaaggag ccagaaagag tccggattct tcatggaaat ttgggaaggt gactgaaag tttttgtgt tgtctctgt ctgtgtctg agctatcc cttctgtct gctcaacatt ctgtgtgcca ggtccaggc tcccggggt gtcacatgc ttgtgtccaa cctcacctgg ctcaatgtt gcatcaacc tgtgtctctat gcagccatga accgcaatt ccgccaagca tatgtctca tttaaaag agggcccg agttccata ggtctccatta gaactgtgac cctagtcc agaatcagg agctctct ctaggacca agtggocagg taataggaga ataggtagaa taacacatgt gggcatttt aciaaatct ctccagcc loccaaatca agctctcca tcatgtgac aatgttcag ccttagacgt ccaaggagt attaat attaaat gaattctgt cttaaaaa aaaaaaata aaaaaagaaa aaaaaataa aaaaaataa aaaaa	Homo sapiens
585	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NP_065103.1	MWNSSDANFS CYHESVLGYR YVAVSWGVRV AVTGTGNNVL TLLALAIQPK P LRTFENLLIA NLTLADLLYC TLLOPFSVDY YLHLHWRTGA TFCRVFGLLL FASNSVSLT LCLIALGRYL LIAHPKLPQ VFSAGGIVLA LVSTWVVGVA SFAPLWPIYI LVPVCTCSF DRIRGRPYT ILMGYFVLG LSSVGIFYCL IHRQVKRAAQ ALDQYKLRQA SIHSHVART DEAMPGRFQE LDRSLASGPG SEGISSEFVS AATTQILEGD SSEVGDQINS KRAKQMAKS PPEASAKAQP KGARRAPDS SSEFGKVTRM CFAVFLCFAL SYTFLLNLIDARVQAPRV VHMLAANLTW LNGCINPVLY AAMNRQFRQA YGSILKRGRPR SFHRLH cttgtctca gagctaac accgtttct cttccacag caaatctt gacagtcac atctctcc agctgtggc aagaagacag A aagctctct acaatct ctgtgtcag gctgtgag acatctgt cctcttttct atagtgtt ggtgactct gttggaat ttcatctga acatgcat gctcagct ccagacaga tcatagaat gctggaattc tcatcatcc acatccat atggattact	Homo sapiens
586	190419	G Protein-Coupled Receptor Ls190419	AJ303165	cttgtctca gagctaac accgtttct cttccacag caaatctt gacagtcac atctctcc agctgtggc aagaagacag A aagctctct acaatct ctgtgtcag gctgtgag acatctgt cctcttttct atagtgtt ggtgactct gttggaat ttcatctga acatgcat gctcagct ccagacaga tcatagaat gctggaattc tcatcatcc acatccat atggattact	Homo sapiens

587	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	LCFRKPVFL LSTANILTVI ILSQLVARRQ KSSYNYLLAL AAADIL VLFV IVFVDFLLED FILNMQMPQV PDKIEVLEF SSHTSIWIT VPLTDRYA VCHPLKYHTV SYPARTRKVI VSVYTICFLT SIPYYWVPNI WTEDYISTSV HHVLIWHCF TVYLVPCSF FILNSIUVYK LRRKSNFRLR GYSTGKTTAILFTITSIFAT LWAPRIMIL YHLYGAPIQN RWL VHIMSDI ANMLALLNTA INFLYCFIS KRFRF	Homo sapiens
588	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NM_020377	aagttictia agtttgaagc gtcagcttca accaaacaaa ttaatggcta ttctacatc aaaaatcagg aaatttaaat ttaattgaa atgtaatgca gcatgtaga aagcttaac cagtgittta aaactaac ttcaagaaa agatagiat gctccctgt tcaataaac ctagagaat gtaatcaga agcaagaagg aaaaaggga attacaaa taacttug tctctgtc tttaacc agcatggaga gaaaattat gctctgcaa caatcatct c-gtattcaga aatggaaaca aatggcact tcaagcaata caacagcagg aactgcacaa tgaanaact caagagaaga ttitoccaa ttgataat ttctgggga tcttgggaaa tgggtgtcc ataatgtt tcttgcagcc ttataagaag tccatctg tgaacgttt calgtiaat ctggccattt cagatctct gttcaagc acgttctct tcaaggctga ctattatt agaggctca atggatatt tggagacct gcttgcagg ttatgttta ttctgtat gtacaagt acagcagat ttattctg accgtctga gttgtgtg ttcttgcac atgttccac ctttggct tctgtatg accagcatca ggaagctct gattctgt gggatcaat ggaatctat calgtcttc tcaataatg tcttggacag tggctctgag caaagcggca gttgcacatc atgttagag ctgaatctc ataaatgtc taagctgag acctgaact atattgctt gggtgtgggc tgcctgtgc cattttcac actcagcact tgaatctgc tgaatctgt ggtctgtgta aaggtggagg tccagaatc gggtgtgggc gttttcaca ggaaggcact gaccacact atcatcact tgaatctc ctcttctgt ttcttggct atcacact gaggaaggc cactgacga calgtgaagt ggggtttatg aagaagagac tgaataagc ttgggtatc acatggctt tggcagcagc caatgctgc tcaatctc tgccttta ctgtctgg gagaattta aggaagact aaggtctgca ctcagaanaag gcatccaca gaaggcaag acaaggtgt ttctctgt tgggtgtgtg ttgaagaagg aaacaagagt ataaggct cttagatgag acctgtct gtaatctgt gttcacttc atcactat agttccaaa tgaatgtta ttatcag tccacaaa tttgtattc taatttag ttgacata ctittgtta taagaact tcaaaaat ttatcagtt tatttcag tgtgtgtc taatgagga tcaaggagga aaaaatccca ctatgtct gttgggtgta atatcagact ggggaanaat gcaaggcaca ttggatccta ctitttca gattgaac cagatctgt gcccacagg ctittaaat tctcaaaa agccaact tcccagctt ctccagctc cctgtctct tcaatctt gagaatag aactaacgac gttactggaa gcccagagc agaaaagaag cactctta gttcagga aagactact gttgaaga aggtctgtc atacaagc agcatcagt cccaagtaag gacagtaga gaagaaggagg agagagattg gagaanaaga gacttgca taagttaggg aaggaagat ttcatttgc atgggagag aggttaac acatgaag caacctatt tctattt ctcttgc aggtgtatg gaaggacag aaaagtaga ggaagatct gggcattgct ctatgaatg aagaattgt gtaataatg gaaggagat catcaaggac atgtatccta aatttctt gagaagcagg ttatgtacc ttgtcagct tctctccc ataatcatt ttggatggaa gccaanaa aaaagaggt ccttgaagat ttgggttag cactcaagg gactgaag tagagggca atagcaaaag ttgttgcact ccgtgaatc taataact tccgcaag agatagagg agatgtgctc ttcttgg tccatttg atagtgta gaaaacact agataggtg agaggttct tctgtccat tgaacaaagg ctatggatag taccactac tatccact accattgtac tgaacaaat tgaatgcat	Homo sapiens

Homo
sapiens

P

NP_065110.1

Cysteinyl
Leukotriene
CYSLT2
Receptor

190427

589

Homo
sapiens

A

NM_018485

G Protein-
Coupled Receptor
C5L2

190437

590

Homo
sapiens

P

NP_060955.1

G Protein-
Coupled Receptor
C5L2

190437

591

Homo
sapiens

A

LG94114

G Protein-
Coupled Receptor
Ls190438

190438

592

cttcctgcag ggagattat gccaggcact ttacattgt tgaattccac accaaagc ttgaattccat ttacagctg
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MERKFMSLQP SISVSEMEPN GTFSSNNRN CTIENFKREF FPVYLIFF WGVLGNGLSI P
YVFLQPYKKS TSVNVEMNL AISDLLFIST LPRADYYLR GSNWFGDLA
CRMSYSLYV NMYSSYFLT VLSVVRFLAM VHPFRLHVT SIRSAWILCG IIWLIMASS
IMLLDSGSEQ NGSVTSCLEL NLYKIAKLQT MNYIALVVCGLLPFTLSIC YLLIRVLK
VEVPESGLRV SHRKALTTII TLIIFFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVT
LALAAANACF NPLL YYFAGE NFKDLKLSAL RKGHPQAKT KCVFPVS VWL RKETRV
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MGNDVSVEY GDYSDLSDRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P
PGNAMVAWA GKVARRRVGA TWLLHLAVAD LCLCLSLPIL AVPIARGGHW
PYGAVGCRAL PSILLTMYA SVLLAALSA DLCLALGPA WWSTVQRACG
VQVACGAATW LALLTVPSA IYRRLHQEHF PARLQCVVDY GGSSSTENAV
TAIRFLGFL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH
LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHCLNPMFL FLYFGRAQLR
RSLPAACHWA LRESQGQDES VDSKSTSHD LVSEMEV
atgtgtggcc cttgtgtct gggtgtgtg cttgtgtgtg tctgtgtgt tgggtgtgtg ggtgtgtgtg ggtgtgtgtg
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tgtgtgtgt tgggtgtgt tgggtgtgt tgggtgtgt tgggtgtgt tgggtgtgt tgggtgtgt tgggtgtgt

Homo sapiens

G Protein-
Coupled Receptor 322
Ls190438

190438

593

596	190595	G Protein- Coupled Receptor SH120	NM_016334	agcaccitggg aaaaggcaga ccgtgtgggg gggctgtggg cccagcgtg cgtggccic gggaggtggg aagtggaggc aggagccic cttaacctic gccatggtt tctgaltga cccagcgtc agtatctt cccaaatatt atttttga ttgggtggc ttttctcat ggcgcaatg tttaagact atgagaltgc tcatgtgt gtacaggtga tcttccgt gacgttgca tttcttga ccatgttga gctcatc tttgaatct taggtgtatt gaatagcag tccgttatt ttacitggaa aalgaacctg tgcgtaatc tgcgtacct ggtttcatg gtgcctttt acattggca ttattgtg agcaatctt gactatcga taacaacga cgtctttt ccgtctctt atggctgacc ttatgtatt tcttctggaa actagggagt ccttttcca ttctcagccc azaacalggg actatcca tagaacagt catcagccgg gttgtgtgga ttgggtggac tttcaggtc ctttttgg gatttgggtc tttcaactgc ccatcaact acatgtta cttctcaggg aatgtgact acacagatat tctagccctg gaacggcgac tgcgtcaaac catggtatg atcataagca aaaaagaaag gatggcaatg gcaaggga aaagtcca gaagggggaa ggtcataca aaccatcagg ttttggggga atgataaaaa gttttaccac ttacgtatca ggaagtga aa atcttact ttttcaacag gaagtggatg ctttggaaaga attagcagg cagcttttc ttgaaacagg tcatctat gctaccaagg agagaalaga atactccaaa accitcaagg ggaaatatt taatttct ggttacttt tctatatta cgtgtgttg aaattttca tggctaacat caatagt ttgtcgag ttgggaaac ggaacctgc aagaaggca ttgatac ac tggatatt cttggaaatc aattgat gaagtgttgg tcccaacaa ttttctcat tctgttga ataatcag tcaatccat cagaggatg cgtatcac ttaccaagt cttttatgcc atcttagca gtatgtctc caatgtcat gtcttctat tagcacagt aatgggcatg tacttgtc cctctgtct gctgtatccga atgagtatg cttagata ccgaccata atcacgaag tcttggaga actgcagtc aacttctt accgttgtt tgaigtatc ttctgttga ggctcttc tagcatatc ttcttatt tggcttcaa acagggacca gagaagcaaa tggcaccttg aactaaagc tactacagac tttagggc cagtggttc azaatttga taaagaggg gggaaanaatg gaaccagggc cgtacattt ataaacaac azaatgtcat ggtagcatt ttaccttca tagcatatc cttccctc aggttact atgacatga gtatcatcag ccagaacatg agagggaaga ctactcaag acaacttca gcagagaga tccgtgttg atagaggt cttgttaggg cggagaagg ccaagaact aaggtga aaacactgg aacttgggg caagacatg ctatggatc tgaagcaaac agttaggt tccgtttaa ggttcatg gaaaggtta tagcttgc ttgagatga ctatnaaa tcaagagact t MSFLDSSIMJTSQILFFGF GWLFFMRQLF KDYEIRQYV VQVFSVTF AF SCTMFELIIF P EILGVLNSSL RYFHWKMNLC VLLILVFMV PFYIGYFVS NIRLLHKQRL LFSCLLWLTF MYFFWKLQDP FPLSPKHGI LSEQLISRV GVIGVTLMAL LSGFGAVNCP YTYMSYFLRN VTDLDLAL RLLQTMDMI ISKKRMAMA RRTMFQKGEV HNKPSGFWGM KSVTTSASG SENLLIQE VDAAELSRQ LFLETADLYA TKERIEYSKI FKGYFNFLG YFFSYCVWK IFMATINIVF DRVGKTDPTV RGIETVNYL GQFDVKFWS QHSILVGI IIVTSIRGLL ITLTKFFYAI SSSKSSNVIV LLLAQMGMY FVSSVLLIRM SMPLEYRTII TEVLGELQFN FYHRWFDVIF LVSALSSILF LYLAKHQAPE KQMAP aggctgcagg cggggctgctg ttgagcgggg gccgcggccg ccgcgcagag atgtgactg ggcgcaggc cagctggaggc gtcggctg cggggcgcg gggggcgaat gttcggga tcaagagaga agatagagc tcaacagggt ctaccttcc tctgtctt cgtgatcc tgggtgct cgaacgc cagcaatcc cgaagctgtg ggttggacct cctcctcag taccgtccc tctgcgaat ggaagcacc ttgggcatg ttgtggaggc ggtggccggg gcggggccc tgalcacat gtctctgat ctatctctc ttgtgctgt gctcttcat aagagaagagg agaaagagag cctgtgggc ctccatttc tgttctct ggggacctg ggtcttgg ggttgcgt ttgttcat atccaggagg acgagacct cgtctgtc cgccgttcc tctgggggt cctcttgg cttgtgtct cttgtctt gtagccaggca tggcgctg ggaaggtggt gggcalggc acggggccc cgggtggga gctgtggg cttggggc gctgtgt ggttcaagtc atcatcgtg tggagtggct ggtgtcacc gttgtcgtg acacaaggcc agctgtcgc taccagccca tggacttgt gatggccic	A	Homo sapiens
597	190595	G Protein- Coupled Receptor SH120	NP_057418.1	aggctgcagg cggggctgctg ttgagcgggg gccgcggccg ccgcgcagag atgtgactg ggcgcaggc cagctggaggc gtcggctg cggggcgcg gggggcgaat gttcggga tcaagagaga agatagagc tcaacagggt ctaccttcc tctgtctt cgtgatcc tgggtgct cgaacgc cagcaatcc cgaagctgtg ggttggacct cctcctcag taccgtccc tctgcgaat ggaagcacc ttgggcatg ttgtggaggc ggtggccggg gcggggccc tgalcacat gtctctgat ctatctctc ttgtgctgt gctcttcat aagagaagagg agaaagagag cctgtgggc ctccatttc tgttctct ggggacctg ggtcttgg ggttgcgt ttgttcat atccaggagg acgagacct cgtctgtc cgccgttcc tctgggggt cctcttgg cttgtgtct cttgtctt gtagccaggca tggcgctg ggaaggtggt gggcalggc acggggccc cgggtggga gctgtggg cttggggc gctgtgt ggttcaagtc atcatcgtg tggagtggct ggtgtcacc gttgtcgtg acacaaggcc agctgtcgc taccagccca tggacttgt gatggccic	P	Homo sapiens
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599 190599 G Protein- NP_057319.1 Homo sapiens
 Coupled Receptor
 GPCR3B

600 190602 G Protein- NM_014373 Homo sapiens
 Coupled Receptor
 GPCR150

P Homo sapiens

P

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 YQSLKAQNAV SRHCPFYVSI QSYWLSFFMV MLFVAFITC WEEVITLVQA
 RITSYMET ILYFPFSSH S YTVRSKKIF LSKLVCFLS TWLPFVLLQV IIVLLKVQP
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 LITPLEQIE KPISIMIC

601 190602 G Protein-
Coupled Receptor
GPCR150 NP_055188.1

A Homo sapiens

A

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602 190623 Melanopsin AF147788

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

[illegible]

[illegible]

P Homo

604	190627	G Protein- Coupled Receptor GPR41 & GPR42	NM_005304	GTWAAA WVPL PTVDPDHAH YTLGTVLLV GLTGMGLNLT VYTFCSRSL LRTPANMEII NLA VSDFLMS FTQAPVFFTS SL YKQWLFGE TGCEFYAFCG ALFGISSMIT LTALDRLV VITRPLATFG VASKRRAAFV LLGVWL YALA WSLPFFFGWS AYVPEGLLTS CSWDYMSFTP AVRATYMLLC CFVFFLPLLI IYCYTIFR AIRETGRALQ TFGACKGNGE SLWQRQLQS ECKMAKIMLL VILFVLSWA PYSALVALVAF AGYAHVLTPY MSSVPAVIAK ASAJHNPIY AITPKYRVA IAQHLPCLGV LLGVSRHRSP PYPSTYRTHR STLTSHSNL SWISIRRQEE SLGSESEVGW THMEAAA VWG AAQQANGRL YQGQLEDLEA KAPPRPQGHG AETPGTKTGL IPSQDPRM	sapiens
				atggatlaag gccocagaca gtctacttc tccggcaatc actggctcgt ctctcggg tactcttca ctttcctgtt ggggcctccc ctaaactgc tggccctggt ggtctctgg ggcgaagctgc agc-gcc-gccc ggtggccgfg gacgtgctcc tgcitaaact gaccgctcg gacctctcc tgcctggt cctgcttc cgcagggfgg aggcagccaa tggcagtcac tggccctgc cttctact ctggccactc tctggattca tctcttca caccatct ctaccgcc tctctggc agctggagc atggaaact tcttgaggtt gggccaccca ctggtggaaca agaccggcc gaggctgggg caggcaggtc tggtagtgtt ggcctgctgg ctgttgct ctgtctacg cagcgggtc tacgtcalag aattctcagg ggcacatccc caccagcagg gcaacaatgg gacctgtac ctggagttcc ggaaggacca gctagccalc ctctgccc tgcggctgga gtaggctgg gctcttgg tggctccgct gatcalacc agctactct acagcgctt ggttggatc ctggcagag gggggcagcca ccggccggcag aggagggfgg cgggggctgt gggggccacg ctgcitaaact tctgtctg ctttgggcc tacaacgtt cccatgtct ggctatct tgcggggaaa gcc-ggcatg gaggtatctc gtagcgctc tgcacacct gtaactctgt gtcgacct ttgtacta ctctctcc tccgggtcc agcgactt tcatggctg ctgaggagg tggtagggct ctggggcag tggcagcagg agagcagcat ggaagcgaag gagcagaagg gaggggagg gtagggaggg gacggagcag ctgaaga gaccagaa cactacag cgttgggaac tggggcag gggctgtg ctgaagcga g MDTGPDSYF SGNHWFVSF YLLFLVLGLP LNLAL VVVF QKLRPVAV DVLNLNTAS DILLFLPF RMVEAANGMH WPLPFLCPL SGFIFFITY LTALFLAAS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSV YVTFSGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVPLIT SYCYSRLVVI LGRGGSHRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGVI CGESPAWRIY VTLLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWQ WQESSMELK EQKGEEQRA DRPAERKTSE HSQGGCTGGQ VACAES caagactgct cctctcgc gactaaca gattggacc atggcttgg agcagaaca gtcacagat tatattatg aggaaaaga atgaatgc actatgact acagtcaata tgaactgaic tgtatcaag aagaigtac agaattgca aagtttcc tctgtatt cctcaata gttttgca tggactgc aggcattcc atggtagtgg caattatgc ctattacaag aaacagaa ccaaaacaga tgtatcac ctgaattgg ctgagcaga ttactct ctattact tgccttgg ggtgtatgt cagttcag ggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca caaaacttg tcttggaa tgcatttgg gctgtaca gcatagacag alattggca gtaactaag tcccaacca atcaggagg ggaanaacct gcggatcat ctgttctgt gtctggatgg ctgcatctt gctgagcala cccagctgg ttittatcac agtaatgac aatgtcaggt gcatcccat ttccccgc taccaggaa catcaatga agcatgatt caatgttag agatctgcat tggatttga tacccttct ttatttgg ggtgtctac ttatcacag caaggacat calgaagatg ccaaacatta aaatactc agccctaaa gttctgca cagctgtat agttttat gtcactaac tgccttaza catgtcaag tctgocgag ccatagacat catctactc ctatcacca gcgtcaaat gagcaaacgc atggacatcg ccatcaagt cacagaagc atcgactct ttacagcgt cctcaacca atccttatg	Homo sapiens
605	190627	G Protein- Coupled Receptor GPR41 & GPR42	NP_005295.1	atggatlaag gccocagaca gtctacttc tccggcaatc actggctcgt ctctcggg tactcttca ctttcctgtt ggggcctccc ctaaactgc tggccctggt ggtctctgg ggcgaagctgc agc-gcc-gccc ggtggccgfg gacgtgctcc tgcitaaact gaccgctcg gacctctcc tgcctggt cctgcttc cgcagggfgg aggcagccaa tggcagtcac tggccctgc cttctact ctggccactc tctggattca tctcttca caccatct ctaccgcc tctctggc agctggagc atggaaact tcttgaggtt gggccaccca ctggtggaaca agaccggcc gaggctgggg caggcaggtc tggtagtgtt ggcctgctgg ctgttgct ctgtctacg cagcgggtc tacgtcalag aattctcagg ggcacatccc caccagcagg gcaacaatgg gacctgtac ctggagttcc ggaaggacca gctagccalc ctctgccc tgcggctgga gtaggctgg gctcttgg tggctccgct gatcalacc agctactct acagcgctt ggttggatc ctggcagag gggggcagcca ccggccggcag aggagggfgg cgggggctgt gggggccacg ctgcitaaact tctgtctg ctttgggcc tacaacgtt cccatgtct ggctatct tgcggggaaa gcc-ggcatg gaggtatctc gtagcgctc tgcacacct gtaactctgt gtcgacct ttgtacta ctctctcc tccgggtcc agcgactt tcatggctg ctgaggagg tggtagggct ctggggcag tggcagcagg agagcagcat ggaagcgaag gagcagaagg gaggggagg gtagggaggg gacggagcag ctgaaga gaccagaa cactacag cgttgggaac tggggcag gggctgtg ctgaagcga g MDTGPDSYF SGNHWFVSF YLLFLVLGLP LNLAL VVVF QKLRPVAV DVLNLNTAS DILLFLPF RMVEAANGMH WPLPFLCPL SGFIFFITY LTALFLAAS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSV YVTFSGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVPLIT SYCYSRLVVI LGRGGSHRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGVI CGESPAWRIY VTLLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWQ WQESSMELK EQKGEEQRA DRPAERKTSE HSQGGCTGGQ VACAES caagactgct cctctcgc gactaaca gattggacc atggcttgg agcagaaca gtcacagat tatattatg aggaaaaga atgaatgc actatgact acagtcaata tgaactgaic tgtatcaag aagaigtac agaattgca aagtttcc tctgtatt cctcaata gttttgca tggactgc aggcattcc atggtagtgg caattatgc ctattacaag aaacagaa ccaaaacaga tgtatcac ctgaattgg ctgagcaga ttactct ctattact tgccttgg ggtgtatgt cagttcag ggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca caaaacttg tcttggaa tgcatttgg gctgtaca gcatagacag alattggca gtaactaag tcccaacca atcaggagg ggaanaacct gcggatcat ctgttctgt gtctggatgg ctgcatctt gctgagcala cccagctgg ttittatcac agtaatgac aatgtcaggt gcatcccat ttccccgc taccaggaa catcaatga agcatgatt caatgttag agatctgcat tggatttga tacccttct ttatttgg ggtgtctac ttatcacag caaggacat calgaagatg ccaaacatta aaatactc agccctaaa gttctgca cagctgtat agttttat gtcactaac tgccttaza catgtcaag tctgocgag ccatagacat catctactc ctatcacca gcgtcaaat gagcaaacgc atggacatcg ccatcaagt cacagaagc atcgactct ttacagcgt cctcaacca atccttatg	Homo sapiens
606	190701	C-C Chemokine Receptor 11	NM_016557	atggatlaag gccocagaca gtctacttc tccggcaatc actggctcgt ctctcggg tactcttca ctttcctgtt ggggcctccc ctaaactgc tggccctggt ggtctctgg ggcgaagctgc agc-gcc-gccc ggtggccgfg gacgtgctcc tgcitaaact gaccgctcg gacctctcc tgcctggt cctgcttc cgcagggfgg aggcagccaa tggcagtcac tggccctgc cttctact ctggccactc tctggattca tctcttca caccatct ctaccgcc tctctggc agctggagc atggaaact tcttgaggtt gggccaccca ctggtggaaca agaccggcc gaggctgggg caggcaggtc tggtagtgtt ggcctgctgg ctgttgct ctgtctacg cagcgggtc tacgtcalag aattctcagg ggcacatccc caccagcagg gcaacaatgg gacctgtac ctggagttcc ggaaggacca gctagccalc ctctgccc tgcggctgga gtaggctgg gctcttgg tggctccgct gatcalacc agctactct acagcgctt ggttggatc ctggcagag gggggcagcca ccggccggcag aggagggfgg cgggggctgt gggggccacg ctgcitaaact tctgtctg ctttgggcc tacaacgtt cccatgtct ggctatct tgcggggaaa gcc-ggcatg gaggtatctc gtagcgctc tgcacacct gtaactctgt gtcgacct ttgtacta ctctctcc tccgggtcc agcgactt tcatggctg ctgaggagg tggtagggct ctggggcag tggcagcagg agagcagcat ggaagcgaag gagcagaagg gaggggagg gtagggaggg gacggagcag ctgaaga gaccagaa cactacag cgttgggaac tggggcag gggctgtg ctgaagcga g MDTGPDSYF SGNHWFVSF YLLFLVLGLP LNLAL VVVF QKLRPVAV DVLNLNTAS DILLFLPF RMVEAANGMH WPLPFLCPL SGFIFFITY LTALFLAAS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSV YVTFSGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVPLIT SYCYSRLVVI LGRGGSHRQ RRVAGLLAAT LLNFLVCFGP YNVSHVVGVI CGESPAWRIY VTLLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWQ WQESSMELK EQKGEEQRA DRPAERKTSE HSQGGCTGGQ VACAES caagactgct cctctcgc gactaaca gattggacc atggcttgg agcagaaca gtcacagat tatattatg aggaaaaga atgaatgc actatgact acagtcaata tgaactgaic tgtatcaag aagaigtac agaattgca aagtttcc tctgtatt cctcaata gttttgca tggactgc aggcattcc atggtagtgg caattatgc ctattacaag aaacagaa ccaaaacaga tgtatcac ctgaattgg ctgagcaga ttactct ctattact tgccttgg ggtgtatgt cagttcag ggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca caaaacttg tcttggaa tgcatttgg gctgtaca gcatagacag alattggca gtaactaag tcccaacca atcaggagg ggaanaacct gcggatcat ctgttctgt gtctggatgg ctgcatctt gctgagcala cccagctgg ttittatcac agtaatgac aatgtcaggt gcatcccat ttccccgc taccaggaa catcaatga agcatgatt caatgttag agatctgcat tggatttga tacccttct ttatttgg ggtgtctac ttatcacag caaggacat calgaagatg ccaaacatta aaatactc agccctaaa gttctgca cagctgtat agttttat gtcactaac tgccttaza catgtcaag tctgocgag ccatagacat catctactc ctatcacca gcgtcaaat gagcaaacgc atggacatcg ccatcaagt cacagaagc atcgactct ttacagcgt cctcaacca atccttatg	Homo sapiens

607	190701	C-C Chemokine Receptor 11	NP_057641.1	MALEQNQSTD YYYEENEMNG TYDYSQYELI CKEDVREFA KVELPVFLTI VFVIGLAGNS MVVAIYAYK QKRTKTDVYLLNLAVADLLL LFTLFWAVN AVHGWVLGKI MCKITSALYT LNFVSGMQFL ACISIDRYVA VTKVPSQSGV GKPCWTCFC VWMAALLSI POLVFTYVND NARCIPIPR YLGTSMKALI QMLEICIGFV VPLMGVCY FITARTLMKM PNKISRPLK VLLTVVIVFI VTQLPVNIVK FCRADIYS LITSCNMSKR MDIAIQVTES IALFHSLNP ILVYFMGASF KNYVMKVAKK YGSWRRQRQS VEEFPDSEGP PTEPTSTFSI gatttggga gtaagggc agtggccag tgaagggc acagggag aggaagctg agtgaat aagaactag ggactccgag ctggcctga gaaacttg agcgagag ctggctac ggctgcat cctacat gctccaaagc agcgctgag ctaactct gctccagggc agtgcctg gcgccaggac ggctgtag ccaattct ggctcttc tcaatgcti gcttgaag ctccagca cgtccggc gctagcttg caaanaat gggtgaac gggtatct aggtctgc cccagaca tgaactag gtaactgc atgcatgg ccatgacg cactatagcc accatgaia agggcagcagg cgggggaca gtagcagaac tctcagct gggtccggac ctctggagg cggccaacac gtaggtgaac gcgtcctgc agctccgga ctgtgttg gtagctggggc tggagtgc ggagggcgc ccggcaggac atccccggg cagcggcggg gcagagagc cgggacaga gggccggg cgggcttca tgaagctg gtagggggt gtagggcc tgggtggg gggaacctg ctggctct accatgaa gtagcagca ggctgggga agtctct caaccttc gtcaaccaac tggcctgac ggaattcag ttgtgcta cctggcta cctggcta gtagaacgctc tgaactica atggcccttc ggcaaggcca tggtagat cgtgtcctg gtagcgtca tgaactga cggcagcgtg tcttctca ctggcatgag tggagcgc taccctgg tggctcggc tctgaagag caccggacc gtaggacagc cggggggac tctggggcc ggaagcggg ggaagcgtc tctctcgg ccaaggcgt gtaggtg gtaggtg tggggggct ggctcctg cccagtgcca ttctccac cagcgtcag gtaggggag agtagcgtc cctgtgtg tccaggaca agtgtcggg cggcagag cagttcgg tgggctccta cctcgcag aaggtgctg tgggtcgt gtagcgtc ggcatcatta tctgtgcta cctgtcgt gtagccta tggcagcc cggcggcc gtaggacag gtagggggc ggtagcgg gtagggcc cgggagcag cggccggga ctgtcggga tcccaaat agtgacalc gtaggtct ccttctct gtaggtcgt cccagacag cgtccacc ctggagcct ctaactgt tcaagcgt gtaggtcgt cagtagat tctgtgcca gtagagcgt tccctgta gtaggtct agtgcact ccaagcgt tcaagcgt cctctacgc ctaggtcgc gtaggtcgc aagagcgt tggggcgt cgtgtct tgaatcaca gtagggcc cttaccgc actaccag cggagcag gtagcagc ctagggcc cggcggcc ctagggcc	P	Homo sapiens
608	190705	G Protein- Coupled Receptor SALPR	NM_016568	gatttggga gtaagggc agtggccag tgaagggc acagggag aggaagctg agtgaat aagaactag ggactccgag ctggcctga gaaacttg agcgagag ctggctac ggctgcat cctacat gctccaaagc agcgctgag ctaactct gctccagggc agtgcctg gcgccaggac ggctgtag ccaattct ggctcttc tcaatgcti gcttgaag ctccagca cgtccggc gctagcttg caaanaat gggtgaac gggtatct aggtctgc cccagaca tgaactag gtaactgc atgcatgg ccatgacg cactatagcc accatgaia agggcagcagg cgggggaca gtagcagaac tctcagct gggtccggac ctctggagg cggccaacac gtaggtgaac gcgtcctgc agctccgga ctgtgttg gtagctggggc tggagtgc ggagggcgc ccggcaggac atccccggg cagcggcggg gcagagagc cgggacaga gggccggg cgggcttca tgaagctg gtagggggt gtagggcc tgggtggg gggaacctg ctggctct accatgaa gtagcagca ggctgggga agtctct caaccttc gtcaaccaac tggcctgac ggaattcag ttgtgcta cctggcta cctggcta gtagaacgctc tgaactica atggcccttc ggcaaggcca tggtagat cgtgtcctg gtagcgtca tgaactga cggcagcgtg tcttctca ctggcatgag tggagcgc taccctgg tggctcggc tctgaagag caccggacc gtaggacagc cggggggac tctggggcc ggaagcggg ggaagcgtc tctctcgg ccaaggcgt gtaggtg gtaggtg tggggggct ggctcctg cccagtgcca ttctccac cagcgtcag gtaggggag agtagcgtc cctgtgtg tccaggaca agtgtcggg cggcagag cagttcgg tgggctccta cctcgcag aaggtgctg tgggtcgt gtagcgtc ggcatcatta tctgtgcta cctgtcgt gtagccta tggcagcc cggcggcc gtaggacag gtagggggc ggtagcgg gtagggcc cgggagcag cggccggga ctgtcggga tcccaaat agtgacalc gtaggtct ccttctct gtaggtcgt cccagacag cgtccacc ctggagcct ctaactgt tcaagcgt gtaggtcgt cagtagat tctgtgcca gtagagcgt tccctgta gtaggtct agtgcact ccaagcgt tcaagcgt cctctacgc ctaggtcgc gtaggtcgc aagagcgt tggggcgt cgtgtct tgaatcaca gtagggcc cttaccgc actaccag cggagcag gtagcagc ctagggcc cggcggcc ctagggcc	A	Homo sapiens

609	190705	G Protein- Coupled Receptor SALPR	NP_057652.1	<p> agaaagagg gctcagg MQMADAATTA TMNKAAGGDK LAELSLVPD LLEAANTSNG ASLQPLDW ELGLELPDGA PGHPGSGG AESADTEARVRLISVVYVW VCALGLAGNL LVLYLMKSMQ GWRKSSINLF VTNLALTDQ FVLTLFWAV ENALDFKWP GKAMCKIVSM VTSNMNMYASV FFLTAMSVTR YHSVASALKS HRTGHRGD CGGRSLGDS CFSAKALCVW IWALAALASL PSAFSTTVK VMGEELCLVR FPDKLLGRDR QFWLGLYHSQ KVLGFLPL GUILCYLLL VRFIADRRAA GTKGGA AVAG GRPTGASARR LSKVTKSVTV VLSFFLCWL PNQALTTWSI LKFNAPFS QEYFLQVYA FVSVCLASH NSCLNPVLYC LVRREFRKAL KSLNWRIASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYPP GVVVYSGGRY DLLPSSSAY </p>	P	Homo sapiens
610	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NM_018970	<p> ggacagaga tttaactgt gtctcaatg cagattata ctgtagaga gattttat ttgtttca ttaacagatt attaaagc aaaaagcatg cagaaaaga agcagactgt ttacttggg aattataga agcgtgtctg ctatgttgg gtagagaac tgggaagtig ttgtaaaa ttataica cccacaaa caaaactct cggaaatgtg aaaaataaga aalgcaatgt tctagaggca ttctaaaga cccactgtc aggttttgg gtgtgttgg tatcatcga cgtttggac tggtagggc ttacttggag ctccattct ggaaagcctt acaaagactga ggaatacag actgcaatc accgggaacg gtctcttgc agcagagaag caactctct cccacttc gcatattcg atggcaaac aagtggaga aagagggaag catgacttga gtacttttg ttgattat ttcaagaa atgtatgat ctacttct ctgtttta tatagatc atgagactg actgaggtg tatcttalc ctccatcat ctatggaga ctatggcat gcactgtaca acatttga caattctg ccttaacag ccttttga acagctac ttggttica taataggagt cagctgttgg ggcaacccc tgaatccat ttgtcttgg aagataaga cctgtcalag agcaccttac tacttctgt tggactttg ctgtcagat atctcagat ctgcaattg ttccattt ggttcaat ctgtcaaaa tggcttacc tggacttgg agacttgc ttgcaagtg atgtcttct tgggggtttt gttctttt cacactgtt tcatctct ctgcaatg gtacacagat acttagctat cggcaatcac cgttttata caaaagaggtt gaactttgg acgttttgg ctgtgtctg tatgtgttgg acttgtctg tggcaatgg attccccg gtttagag ttgttagg ttcttctt calcttcta gccacacag ttgttactt caagcttga cgtcttca gggttaatga ttcttagga ttatgtgc ttcttctt calcttcta gccacacag aacttgaat ttatgttcc tttttctt accatcgaag aaaaatgaag ccaatcag tttagcag agtcagaccg acccttacc accaccttgg ctgggcalca ggcaaatgc aaacacaca ggcaagaaga ggctattgtt cttagacag ttcaaatgg agaaaagaat cagcagaatg ttctataa tgaatttt gtttatacc ttgttggcc cctacttgg tggcgtttat tggtagaggt ttgcaagagg gctgttagta ccaaggggat tttaacag tgcgttctg atgtattgg ccaagcag atcaatct ttgttctga ttctcaaa cagggaagctg aggcgtgtt tcaagcaaac ccttttacc tgcagaataat cagggtacc aagggaact tacttgtta tatgaggag catcttana tcttagctt ttgttaaat aacttctt gcttagcaat ttgttggccat agccatttt tggagaagaaa ttcaagag gaalcaag tttaagat ttggcaaca ttcttgcag ttgcaalag ttcaacta alccatttt aacttctga gttacttgc tggctggcag caaaggttg taataga gggaactgaac cactgtccca agttttta tgggtcaaa aactagata tgaagtagc aggtgtciaag taicagtct aatgtctg tatgtacta catatgaaaa aacatcaaaa aactaatgc attgacatc ttataaat aagttagcat gagggtaat ttgtgataa aactaat ttgaagttga agactttaa acatttata ctacttgt ttgcaaga claaatatt tggggactta aggtactga atccataa gaggtgcaa tgaattatg gaatacaca cttaaaac cgtcttga gttctggga gcaatcaaa gcagtattt gggttaatt ttnttgrat taatcatg ctatttcaa </p>	A	Homo sapiens

611	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>ataccacatt cctcatctac tagtaagatt gctagcatig aactgatta tgggtttt gttgattgg tataaggtt ttcaatca</p> <p>tttaattt acaaatgcta gatatgtgc tggaggagca catuaatggt accagctgt cacaacigag cagtctaat aatgcagaat</p> <p>aaatacatgt tgcctaaag ggtatctag tatctcat ctatttagc actggagcaa atagccaagg gaaatacaat cagtactgg</p> <p>tcatgctat gcatcaaaa gtcangaa gataattat tacttttc ttittttic acatgggtg aaactuaang tgcatacac</p> <p>tgaataaag agattttt ctacgggtg ctacccctc taaactgtc taagaagcag scagtugag tatgttata tttaagta</p> <p>gcctacagg ggaagaccaca gccatagat gacatccgc acaattgtg aagcaattat tciactgag gcacagctt gttatct</p> <p>tctgcacatt cagtgtatg gtaattaaa ttattcagt tttaactgt gaaagcttat attatgatt ctgtaattt agaaataca</p> <p>tagagctgt gagtctcat cttaagata cagaigtg aactcaata taagatgcta ttggcaaaa ttacocgtg tagccgttta</p> <p>attttctga aataagttt acattttg cacatacaa cgtttttt aattggggg scaagcaca actagggaaga ctactttat</p> <p>taiggtttg cttttgat ctgtagcta ctatattcca gactggaaat gtagaataa taatcaaat aatgcigata aactgacata</p> <p>atattatcgt taaaagcaat attgtgtat ttattaat catccctta ttactttaa algocagtag tattagaga tgrtaccig</p> <p>cttagtaat tggctcaga tttaataa aacatcac tttaattgg agcatagta catagaatt tgggtgtcta aatatacaac</p> <p>tgtagaag aatggttac actaactta tgaataact agaaaagt attatttt ttgtttct gttgtttg ttatgggtg</p> <p>gtttttga agttattt ttittgga ttgataat aagttagga actataaac acagaattcc atattgtat agtactcig</p> <p>taagagaat atcaataa ataaggaata taalcaatg aatgttca alggttaaaa aaaaaaaa aaaa</p> <p>MANYSHAADN LQNLSPLTA FLKLSLGT IGVSVVGNLL ISLLVKDKT</p> <p>LHRAPYVFLD LCCSDILRS AICFFVENS VKNGSTWYTG TLTCKVIAFL</p> <p>GVLSCFHTAF MLFCISVTRY-LAIAHHRFYT KRLTFWTCLA VICMVVTLVS</p> <p>AMAFPPVLDV GTYSFIREED QCTFQHSFR ANDSLGFMLL LALLATOL</p> <p>VYLKLIFFVH DRRKMKPVQF VAAVSNWTF HPGGASGQAA ANWLAFGRG</p> <p>PTPPTLLGIR QNANTTGRRR LLVLDEFKME KRISRMFYIM TELFLTWGP</p> <p>YLVACYWRVF ARGVVPGGF LTAAVVMSEA QAGINPFVCI FSNRELRRCF</p> <p>STILLYCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein- Coupled Receptor GPR26	LG93120	<p>aggctagg agctcttc cactgtccc atcggctccc actgggggt gctgtcaag tgcctgaag acagcaaggc</p> <p>cgcatcgac ccccttgt actcttact ggcacacag taocgcaaaa gctgcagga gaittgaac aggcctcgc</p> <p>acagagctc catccactc tctggctca caggagac tcacagccag aacatcgc cgggtctga g</p> <p>MNSWDAGLAG LLVGTMGVSL LSNALVLLCL LHSADIRQA PALFTLNLTC</p> <p>GNLLCTVVNM PLTLGVVAR QPAGDRLCR LAFLDTFLA ANSMLSMAAL</p> <p>SIDRWVAVVF PLSYRAKMLR RDAALMVAYT WLHALTFPA ALALSWLGFH</p> <p>QLYASCTILCS RRPDERLRA VFTGAFHALS FLISFVVLCC TYLKVARFHC</p> <p>KRIDVTIMQT LVLLVDLHPS VRECLLEEQ RRRQRATKKI STFIGTFLVC</p> <p>FAPYVITRLV ELFTVPIGS HWGLSKCLA YSKAASDPFV YSLLRHQYRK</p> <p>SCKEILNRL HRRSHSSGL TGDHSQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein- Coupled Receptor GPR26	LR26	<p>atggccaaca ctaccgaga gccigaggag gtgagggggc ctctgtccc accgtccga tgcattag tgaactgtt</p> <p>actgtggga ctgattat gctgtagctt ggcgggaac gccatctgt cccgtcgtt gctcaaggag cgtgccctgc</p> <p>acaaggctc ttactctc ctgtctgacc tgtccctggc cgtatgcata tctgtctcc ctgtctcgt gctctgtgc</p> <p>ggcaggctc ttatggacc ttatgtcac tcatgtgcaa gattgtggcc ttatggcc tgcctttt cttccatgc gctcatgc</p> <p>ttgtctcat cagcttacc cgtatcatgg ccatacgcca ccacccttc tacgcaagc gcatgacact ctggacatgc</p> <p>gcggctgtca tctgcatggc ctggaccctg tctgtggcca tggcttccc accgtctt gactgtggca ctataaagt</p> <p>tattgggag gaggaccagt gcatcttga gcatcgctac ttcaaggcca atgacacgtt gggcttcatg ctatgtgg ctgtgtcat</p>	P	Homo sapiens
614	190741	Sreb3	NM_018969	<p>atggccaaca ctaccgaga gccigaggag gtgagggggc ctctgtccc accgtccga tgcattag tgaactgtt</p> <p>actgtggga ctgattat gctgtagctt ggcgggaac gccatctgt cccgtcgtt gctcaaggag cgtgccctgc</p> <p>acaaggctc ttactctc ctgtctgacc tgtccctggc cgtatgcata tctgtctcc ctgtctcgt gctctgtgc</p> <p>ggcaggctc ttatggacc ttatgtcac tcatgtgcaa gattgtggcc ttatggcc tgcctttt cttccatgc gctcatgc</p> <p>ttgtctcat cagcttacc cgtatcatgg ccatacgcca ccacccttc tacgcaagc gcatgacact ctggacatgc</p> <p>gcggctgtca tctgcatggc ctggaccctg tctgtggcca tggcttccc accgtctt gactgtggca ctataaagt</p> <p>tattgggag gaggaccagt gcatcttga gcatcgctac ttcaaggcca atgacacgtt gggcttcatg ctatgtgg ctgtgtcat</p>	A	Homo sapiens

615	190741	Sreb3	NP_061842.1	<p> cggcagctacc catgctgct acggcaagct gctctctc gattatgct accgcaagat gtagccagtg cagatggtgc cagccatcag ccagaaatgg aatitccatg gtccgggggc caccggccag gctgctgcca actgagatgc cggcttggc cgtgggocca tgcaccacac cctgctgggt atccggcaaga atggcgatgc agccagccgg cggctactgg gcatggacga ggtcaagggt gaaagcagc tggggccgat gttatgcg atcacatgc tcttctgct cctctgggtca cctatcag tggctgcta cggcgagtg ttgtgaaag cctgctgcti gcccacagc tacttgcca cctgcttgg gattgagcttc gcccaggctg ccgtcaacc aattgctgc ttctgctca acaaggact caagaagtc ctgaggatc agcccccctg ctggggcca ggaaggcc cggctccag agaaacctat tggctatg ga MANTTGEPEE VSGALSPSA SAYVKLVLLG LMCVSLAGN AILSLVLKE RALHKAPYYF LLDLCLADGI RSAVCFPVL ASVRHGSSWT FSALSCKIVA FMAVLCFHA AFMLFCISVT RYMAIAHRF YAKRMTLWTC AAVICMAWTL SVAMAFPPVF DVGTYKFIRE EDQCIFEHY FKANDTLGFM LMLAVLMAAT HAVYGLLLF EYHRKMKPV QMVPASQNW TFHGPATGQ AANWIAFG RGPMPPTLLG IRQNGHAASR RLJGMDEVKG EKQLGRMFYA ILLFLLWS PYIVACYWRV FVKACAVPHR YLATAVWMSF AQAAVNPVC FLNKDLKKC LRTHAPCWGT GGAPAPREPY CVM </p>	P	Homo sapiens
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	<p> gaggctgic cacagctag agcaggaaag gggggaaag ggggaaag ggttagcag gttatgaat tatcaggagc aggaacaga ctagggcat gccaggct acagagcc tcataggcc aggtgtcca ggggggagga aacaggagc tggactcc tctctt cctctc ttagctc aggtgacg cgtgagat gaattccac cgtttagt tggcactgt cctgggcat ggtatagc tctcagacc cttctgcc aacacocca aacttctct ttgaataat attcataa attgclatt cacatgatt cttcaatgc atcagccac tctgtgaag cagactaac tgaanaattt aagaagaana acaggcttag gggagtaag taactccc agtcacagc ctatgagca gcaagcttgg gactccgag cctcgctct ttctctct gggacacct gctgattcc tggctctat ccacttcca gggccctgc ttggggccc aagggaacac ttutgcaga ggaaggagc cctgacatg ttaggacag aggcagctct agttgggtc ctgtcatc tgggacaggg aaactccag ctctctcct ggggtggag cttggggctg ccttcacag cgggggtaact ctctctc cctctct ctgocattta gggccctct tacaggcgcc gcatgcaca talacctgg catcaggct gttccctgccc ctggcccccac taccaccaat ctgaccaac aggaaggtgg tgggtgtcc ttccacac cctctctct aggtgtgggc gttgggaggg gttccacaga gggcccaagag aagcactaa ttctacagc tcttctag agcttctagt gggctctgccc agttgggag acactgag acctcttc ttagcaccac caatctga tggctgca tggccacat caatctct gctctcac ccaatttt ctgggccaat gctctggag gcagtggtct gattgctga gttgctcca tggctgca attctagc ctggagctca tgggtccct gggctatggg ctgtggggcc ccatggctt gctgggaaat ttggcggtgc ttgggtact gattgaactt gcccggagag cccctggccc acctcagac acctgtct tcaacctgac tggcgggac ctgggagctgg cactactct cctcttgg gcagccgagt cggcacttga ctctcagg cttccagg gttcccttgc caagatgggt ctgacggcca ctgtctcaa cgtctatggc agcacttcc tcatcacgc gctgagctt gctcgtactt ggggtgtgtc catgctgccc ggggcaaggca cccactctc actcttgg gcccgaalag ccacctggcc aggtggggcc gctggctgccc tgggtgaggt gccacagct gttctggggg ttgggggtga gttgtgtgt gttggctt gttccctg ttccacag aggtactggc tgggggctta ccagctggcag aggtgtgtgc tgggttcat gttggcttgg ggggtcata ccaacagta cttgtgtc ctgggttcc tgcagggccg gcaacggcg cggcagggaca gcaagggtctt gggccgctct gttccgcatcc tgggtgtc ctctctc tgcgtttc ccaacatgt ggtctctc tgggtgtcc tgggtgagtt gactgtgtt ccttggaaca gttactta tactatcag acgtatgtct tccctgtcac tactgttgg gacacagca atagctgctt caacctgtt ctgtatgtc tctgagggc gggggcccg caggctctgg caagccatt cagggtatctg cggctgaggg tggggcccca ggggtggaggg tgggtggcaac aggtgtgccc </p>	A	Unidentified

Accession	Protein	Gene	Species
617	G Protein-Coupled Receptor H7TBA62	ENSP00000201	Homo sapiens
190742	G Protein-Coupled Receptor H7TBA62	359	
618	G Protein-Coupled Receptor GPRC5D	NM_018654	Homo sapiens
190743	G Protein-Coupled Receptor GPRC5D		

619	190743	G Protein-Coupled Receptor GPRC5D	NP_061124.1	gagcaggag gaggataa MYKDCIESSTG DYFLLCDAEG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQQLFLSV LGLFGLAF AFIELNQQTQV VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSWTTL: CIAIGCSLLQ IIAITEYVTL IMTRGMMFVN MTPCQLNVDF VVLLVYVFLF MALTFVSKA TFCGPCENWK QHGRLLIFTV LFSIIWVWV ISMLLRGNPQ FQRQPDWDDP VVICALVTNA WVFLLLYVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAIEDVA LTSYGTPIQP QTVDPTQECF IPQAKLSPQQ DAGGV cggcgaggcg gggaaactcc cigaagagcg cctgggac agaaccttg aagacagca tggscatgg ggaaccaacc agagcctggc ctgggagaca ggaagccat ccacaagoc tggatgat gcttgggact gctctctc cigtccag gggctgggc ccaggccat gtccaccgc gctgaagca aggcctaac cctctgact acacatgvg tgaacgctt ggggcgggg gcacgctct ggagggcgcg gctggggcg gcattgac cagtttgg ctacacatca tcttggggc cagctccoc ttgtgcagg accaagaa agggagcctg ctggggagcc aggtatcti cctctgggg accctgggc tctctgct cgtgtgoc tgtgtgga agccgact ctccactgt gctctggc gctctctt tggggtctg ttgccaat gctcttgg tctggcgct cagcttgg cctcaacti cctggccc aagaaccag gggccgggg ctgggtgac ttacttgg cttctgct gacccigga gaggatca tcaataga ggtctgac atacccgg ttggggcag tggcgaggcg ggcctcagg gcaacagcag cgacggcg ggccggcg ccccgggc cctctggc cgtggaca atggacttg cgtggga agcatgggt cttgtgct ctacacag ccactocgt tggcatagg gttgtggtg tgcatagta tacttggc acaagcagc acacagtc cactgggat gacccacg tggcatgc cctggccc atgctggg cctctcti cttctagc atcccgagg tctccagt gacaaatc agccagagc aagcttaca gggggacag taccoccc gggcgggcg ctatgagac atctgaaag agcaagagg ctgagagcag ttctggaga acaaggctt ttcatgat ggccgggtg cagctaaag ggcgggtga ccaatcac ggtacaaagg gcatctgctg accagtgtg accagccac tgaagtgcc ctgagcaca agttccgt cgaaggagct tacgacatca tctccacg gggccacg aacagcagg tgaaggcag tggcaactg acccgggg ctgaagacat gctacggt gggcatgc cctggccc agggggccac accgggaaa gacggcaga actctaggt cttagaac cctacggt gggacatg cagcggtggc gaggagaggc ggcggttt gggggggcc ctgaagact gggccggcg aaggactct ccaggctct cctccctg gcaaggcag aacatggcc ccagatcgg aaggccctc cttctgca gtttgggt ggtgtcag ggtgtccca cccctctc agtgttgg ggtcaggga gccaaccca gctctgcc aggtacat cggcggtcac actccagcca aatagtctc tcgggggt ggtcggcg cgctatgt tcttggga ttctgcaac ctcaagagc ttccaggcg ctaggcctg gacttgc cttgtggg acaagggg ctaataat acatttgc ttataaaa aaaaaaaa aaaa MGTQPEPLG ARMAHKALV MCLGLPLF PGAWAQHVPGCSQGLNPL YVNLCDRSGA WGIVLEAVAG AGVITFVLT IILVASLPFV QDTKRSLLG TQVFFLLGTL GLFCLVACV VKPDFSTCAS RRFLGVLFA ICFSCLAAHV FALNLRKN HGPRGVFT VALLTLVEV IINTEWLT LVRSGEGGP QGNSSAGWAV ASPCAVANMD FVMALTYVM LLLGFLGAW PALCGRYKRW RKHGTVLLT TATSVAIWV WVMYTYGNK QHNSPTWDDP TLALALANA WAFVEFYVP EVSQVTKSSP EQSYQGDMP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQTEMALM HKVPSEGAYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPKDG KNSQVFRNPY VWD	P	Homo sapiens
620	190744	G Protein-Coupled Receptor GPRC5C	NM_018653	cggcgaggcg gggaaactcc cigaagagcg cctgggac agaaccttg aagacagca tggscatgg ggaaccaacc agagcctggc ctgggagaca ggaagccat ccacaagoc tggatgat gcttgggact gctctctc cigtccag gggctgggc ccaggccat gtccaccgc gctgaagca aggcctaac cctctgact acacatgvg tgaacgctt ggggcgggg gcacgctct ggagggcgcg gctggggcg gcattgac cagtttgg ctacacatca tcttggggc cagctccoc ttgtgcagg accaagaa agggagcctg ctggggagcc aggtatcti cctctgggg accctgggc tctctgct cgtgtgoc tgtgtgga agccgact ctccactgt gctctggc gctctctt tggggtctg ttgccaat gctcttgg tctggcgct cagcttgg cctcaacti cctggccc aagaaccag gggccgggg ctgggtgac ttacttgg cttctgct gacccigga gaggatca tcaataga ggtctgac atacccgg ttggggcag tggcgaggcg ggcctcagg gcaacagcag cgacggcg ggccggcg ccccgggc cctctggc cgtggaca atggacttg cgtggga agcatgggt cttgtgct ctacacag ccactocgt tggcatagg gttgtggtg tgcatagta tacttggc acaagcagc acacagtc cactgggat gacccacg tggcatgc cctggccc atgctggg cctctcti cttctagc atcccgagg tctccagt gacaaatc agccagagc aagcttaca gggggacag taccoccc gggcgggcg ctatgagac atctgaaag agcaagagg ctgagagcag ttctggaga acaaggctt ttcatgat ggccgggtg cagctaaag ggcgggtga ccaatcac ggtacaaagg gcatctgctg accagtgtg accagccac tgaagtgcc ctgagcaca agttccgt cgaaggagct tacgacatca tctccacg gggccacg aacagcagg tgaaggcag tggcaactg acccgggg ctgaagacat gctacggt gggcatgc cctggccc agggggccac accgggaaa gacggcaga actctaggt cttagaac cctacggt gggacatg cagcggtggc gaggagaggc ggcggttt gggggggcc ctgaagact gggccggcg aaggactct ccaggctct cctccctg gcaaggcag aacatggcc ccagatcgg aaggccctc cttctgca gtttgggt ggtgtcag ggtgtccca cccctctc agtgttgg ggtcaggga gccaaccca gctctgcc aggtacat cggcggtcac actccagcca aatagtctc tcgggggt ggtcggcg cgctatgt tcttggga ttctgcaac ctcaagagc ttccaggcg ctaggcctg gacttgc cttgtggg acaagggg ctaataat acatttgc ttataaaa aaaaaaaa aaaa MGTQPEPLG ARMAHKALV MCLGLPLF PGAWAQHVPGCSQGLNPL YVNLCDRSGA WGIVLEAVAG AGVITFVLT IILVASLPFV QDTKRSLLG TQVFFLLGTL GLFCLVACV VKPDFSTCAS RRFLGVLFA ICFSCLAAHV FALNLRKN HGPRGVFT VALLTLVEV IINTEWLT LVRSGEGGP QGNSSAGWAV ASPCAVANMD FVMALTYVM LLLGFLGAW PALCGRYKRW RKHGTVLLT TATSVAIWV WVMYTYGNK QHNSPTWDDP TLALALANA WAFVEFYVP EVSQVTKSSP EQSYQGDMP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQTEMALM HKVPSEGAYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPKDG KNSQVFRNPY VWD	A	Homo sapiens
621	190744	G Protein-Coupled Receptor GPRC5C	NP_061123.2	cggcgaggcg gggaaactcc cigaagagcg cctgggac agaaccttg aagacagca tggscatgg ggaaccaacc agagcctggc ctgggagaca ggaagccat ccacaagoc tggatgat gcttgggact gctctctc cigtccag gggctgggc ccaggccat gtccaccgc gctgaagca aggcctaac cctctgact acacatgvg tgaacgctt ggggcgggg gcacgctct ggagggcgcg gctggggcg gcattgac cagtttgg ctacacatca tcttggggc cagctccoc ttgtgcagg accaagaa agggagcctg ctggggagcc aggtatcti cctctgggg accctgggc tctctgct cgtgtgoc tgtgtgga agccgact ctccactgt gctctggc gctctctt tggggtctg ttgccaat gctcttgg tctggcgct cagcttgg cctcaacti cctggccc aagaaccag gggccgggg ctgggtgac ttacttgg cttctgct gacccigga gaggatca tcaataga ggtctgac atacccgg ttggggcag tggcgaggcg ggcctcagg gcaacagcag cgacggcg ggccggcg ccccgggc cctctggc cgtggaca atggacttg cgtggga agcatgggt cttgtgct ctacacag ccactocgt tggcatagg gttgtggtg tgcatagta tacttggc acaagcagc acacagtc cactgggat gacccacg tggcatgc cctggccc atgctggg cctctcti cttctagc atcccgagg tctccagt gacaaatc agccagagc aagcttaca gggggacag taccoccc gggcgggcg ctatgagac atctgaaag agcaagagg ctgagagcag ttctggaga acaaggctt ttcatgat ggccgggtg cagctaaag ggcgggtga ccaatcac ggtacaaagg gcatctgctg accagtgtg accagccac tgaagtgcc ctgagcaca agttccgt cgaaggagct tacgacatca tctccacg gggccacg aacagcagg tgaaggcag tggcaactg acccgggg ctgaagacat gctacggt gggcatgc cctggccc agggggccac accgggaaa gacggcaga actctaggt cttagaac cctacggt gggacatg cagcggtggc gaggagaggc ggcggttt gggggggcc ctgaagact gggccggcg aaggactct ccaggctct cctccctg gcaaggcag aacatggcc ccagatcgg aaggccctc cttctgca gtttgggt ggtgtcag ggtgtccca cccctctc agtgttgg ggtcaggga gccaaccca gctctgcc aggtacat cggcggtcac actccagcca aatagtctc tcgggggt ggtcggcg cgctatgt tcttggga ttctgcaac ctcaagagc ttccaggcg ctaggcctg gacttgc cttgtggg acaagggg ctaataat acatttgc ttataaaa aaaaaaaa aaaa MGTQPEPLG ARMAHKALV MCLGLPLF PGAWAQHVPGCSQGLNPL YVNLCDRSGA WGIVLEAVAG AGVITFVLT IILVASLPFV QDTKRSLLG TQVFFLLGTL GLFCLVACV VKPDFSTCAS RRFLGVLFA ICFSCLAAHV FALNLRKN HGPRGVFT VALLTLVEV IINTEWLT LVRSGEGGP QGNSSAGWAV ASPCAVANMD FVMALTYVM LLLGFLGAW PALCGRYKRW RKHGTVLLT TATSVAIWV WVMYTYGNK QHNSPTWDDP TLALALANA WAFVEFYVP EVSQVTKSSP EQSYQGDMP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQTEMALM HKVPSEGAYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPKDG KNSQVFRNPY VWD	P	Homo sapiens

622	190745	G Protein- Coupled Receptor LGR7	NM_021634		<p>atgacatcgt gttctgtct cttacatc ttattttt. gaaataatt ttctatggg ggtggacagg atgcaagtg ctccttggc tatttccct gttgggaacat cacaaagtc ttgctcagc tctgcacgt taacgtgtg gacgactcg ggaatcaggc cga tggagac aactgtggag acaacatgg atgttgcat caattgaca aattttgc cagtctac aanaatcatt cccaatacc ttitgggca gaaacacgt aatgttgg cgtgtgtg ccaagtcaat gttttgcca aggtctggag cttcctctg atgaaacca ttacagact gttccagg ttctcaaa ttgtagtca atgtcacit agtggactt aataagaaag cttcctctg attgttcaa gaattatcat gatctcaga agctgacct gcaaaacat aagattacat ccatctcat ctatgttuc agaggcaga atagccttac taaactgcat ctacgcat acagaataac cttctgaag cgggtgtt ttgaatct tcaagatct tcaagacta gaaggctga taattgaaga taatcacctc agtgcgaatt cccaccaac atttatgga ctatctc ttattctt agtctgatg aataacgtcc tcaccggtt acctgataaa cctctctg aacacatgcc aagactacat tggctggacc tgaaggcaa ccatatccat aattaaaga attgactt tattctgc agtaattaa ctgttttatt. gatggagaa aacaaata atcacttaa tgaataact ttgcacct tccaagaact ggaatgag gaattgaga gtaataagat tgaatactt ccacogctta tattcaagga ctggaaggag ctgtcaaat tgaatcttc ctataacca atccaagaaa ttcaagcaaa ccaattgat tatctgca aactcaagtc tctagccta gaaggagatg aaatttcaa tatccaaca aggaattga gacctctat gaalictct cacatatt ttgaagaatt ccaatgacti ggttatgac cacatgtcg cagctgtaaa ccaaacact agtgaattc atcttagag aatcttgg caagcattat tcaagagagta ttgtctggg ttgtatctg agttaacttc ttggaaca ttgtcat ttgcagca cctatatca ggtctgaga caagctgtat gccatgcaa tcatttct ctgtctgcc gactctaa tgggaalata ttattctg atcggaaggct ttgacctaaa gtttctgga gaalacaala agcatggcca gctgtgag gtagtact atgtcagct ttagagatct ttggocact tgcacaga agtatcagtt ttactgtaa cattctgac attggaataa tacatctgca ttgtatcc tttagatgt gtagagacc gaaatgac aacaattaca gttctgattc tcattgat tactgtgtt alagtgctt tcaatcatt gagaalaa gaaatttca aaacttaca tggcaccaat ggaatgact tcctctca ttcaagat acagaagta ttgagocca gattatca gtagcaatt ttctgtat taattggc gcaattaca tcatgttt ttctatgga agcatgttt alagtgta tcaagtgcc atgaagcca ctgaataag gaataagtt aaaaagaga tgatcttc caacgttt ttctatag tattatgta tgcattatc tggalacca ttgttatt gaaattct tcatgtct aggtagaat accagttacc ahaactctt ggttagtgat ttattctg occataca gttcttga ccaattctc tatactga cccaagacc attaaaga algattcaic ggttttgta taactaca caagaataa ctatggacag caagggtcag aaaacatag ctcatcatt catctgggtg gaaatggc cactgcagga gatgccact gattatga agcggacct ttacatag cctgtgaaa tgcactgat ttcaalca acgagacta attctatc alga</p>	A	Homo sapiens
623	190745	G Protein- Coupled Receptor LGR7	NP_067647.1		<p>MTSGSVFFYLIFGKYFSGHGGQDVKCSLG YFPCGNITKC LPQLLHCNGV DDCGNQADEDCGDNNGWSM QFDKYFASY KMTSQYPFEA ETPECLVGSV PVQCLCQGLE LDCDETNLRA VPSVSSNVT MSLQWNLRK LPDCKKNYH DLQKYLQNN KITSISYAF RGLNSLTLY LSHNRJTLK PGVFEDLHRL EWLIEDNHL SRSPPTFYGLNSLLEVLMM NNLTREPK PLCQMPRLH WLDLEGNHH NERNLTISC SNLTVLVMRK NKINHLNENT FAPLQKDEL DLGSKNIENL PPLFKDLKE LSQLNSYNP IQKIQAQFD YLVKLKSL EGEISNIQ RMFRPLMNL HIYFKKFQYC GYAPHVRSC PNTDGISSLE NLLASIQRV FVWVSVATC FGNIFVICMR PYRSENKLY AMSISLCCA DCLMGYLVFV IGGFDLFRG EYNKHAQLWM ESTHCQLVGS LAILSTEVSV LLLTFLTEK YICIVYPRC VRPGKCRIT VLIWITGF IVAFTPLSNK EFFKNYYGTN GVCFLHSED TESIGAQYVS VAJFLGNLA AFHVFSG SMFYSVHQSA ITATEIRNQV KEMILAKRF FFVFTDALC WPIFVVKFL SLLOVEIPGT ITSWWVFIL PINSALNPIL YLTTTRPFKE MIHRFWYNYR QRKSMDSKQ KTYAPFIWV EMWPLQEMPP ELMKPDFTY PCMSLSISQS TRLNSYS</p>	P	Homo sapiens

Accession	Gene	Protein	Species	Sequence
190748	GPCR Ls190748	AX147756	Homo sapiens	gtctgggggtt ggggggagtct ggggacagggg tcaattgctt ggaagcaagtg ctctccatcc cctgactctt gctgatctag ttggggctcc agagtggggga ggaagaaagg actttgaaac ttctctggcc ttaccgtttt agccatcaaa ctctgagctg gagatagtga cgaatgtgaca ggaactttcc ctgggctctt ctggggccaca attctggcc gagagaaaga ggaagaaaga ggttgagacc ttcttacc ctgagggccat gtgtgtatgagc tgcagtcgca cctctcttg ccataaggca tatgtatgtgt ggtttgagcag ggaagtggcc agcc-gagca gccacaggta cgtttccagc actagagtaga ggttgacatc ctggcagggcc acctgacaaa tggcagtgtat aaggaaggggg gtccaggata gagcaagagt ccatagtatga acagacacag tatgtgagagc ttgtatgtct ctggggagtcc gttggggatcg ataaacctca gccatgtctc ctgcatgttc calctttcga atctgttgc ttgtatgtga gggcaatttg agcatgtctg agtatagaaga gacaaagagg agcatgtctg ggaagagtagc aacggagagat aggggtcagca cgaagtgtagg gtgaataaca gcaaggaagc tggcatgtcc ttgtatggga gtctctggtg acaatgggaa tccagttggg aggaagaccaa tgaagtgaaga cactaaccc agccgggcaa tggcaggccccc gggccacgaac cactcatga tcttcaagta gctggaaaggc tgcgttatgg caagtgact gtcaaaagggt atcagatga ccgttgaagaa aagtgacagt gcggagagaa gtacaaatgc catccgcaagg ctggcacagg tctctgtgt gggccggagaa ggggttgagaa gctgtgtctt gagtaggcca gtagatggcca caaccaatca ggtgtcagcc aacgccagat tcaaggtgaa gcaagagactg acacatcat tctgtggat caacagcag acagccacag ccactagtgt gttatgtaga atgatatagg agggccaggac agcaaggatc actccaaatg agaaagatga ttcaatgtc cgaagtggca ggaattcatc taccaggggca tg
625	190748	GPCR Ls190748	CAC39548.1	MESSFSFGVI LAVLASLIA TNLVAVAVL LLIHKNDGVS LCFITLNLAVA DTLIGVAISG LLTDQLSPS RPTQKTLCSL RMAFVTSSAA ASVLTVMLIT FDRYLEAKQP FRYLKIMSGF VAGACIAGLW LVSYLIGFLP LGIPMFQQTA YKQCQSFYAV FHPHFVLTLS CVGFTFAMLL FVFFYCDMLK IASMHSQQIR KMEHAGAMAG GYRSPRTPSD FKALRTVSVL IGSFALS WTP FLITGIVQVA CQECHLYLVL ERYLWLLGVG NSLNLPLIYA YWQKEVRLQL YHMLGVKKV LTSFLFLSLA RNCGPERRPRE SSCHIVTISS SEFDD
626	190749	G Protein-Coupled Receptor GPR62	AF317653	ataggccaact ccacagggctt gaacggctca gaaagtcgacag gctctgtgggg gttagatccg gcagagctgtcg tggaggttggg gggcatcttctg gggcaacggcg ccgtctgtgt cgtgtgtctg cgcacgcggg gacitgcgca cgtgctctac ctggcgacac ttgtgtgtgt ggaacttctg gggggcgctg ccataatgca gcttgggcttg ctggcgcgac cgtctgcccgg gcttggggccgc gtcggccctg gccccggccc atgcggcgcc gctcgcttcc ttatccggc ttctgttgcgg gcttgcagcgc tcaagggttggc cgcacttggc ctggcagcgt accgctcat cgtgcacccc ctggcgcgacag gctctgcggcc ggcgccttgg ctctgttctca ccgccttgg ggcgcggcg ggaactgttg ggcgcgtctc cctgtctggc ccgcgcggccc caocgcggccc tgcctctgt cgtgtctgg ttcttggctgg ggggcttggg cccttccgg ccctcttgggc cctgttgggc ttgcgtgttg ccgcctct cgtgtctggg ggcctacaggcg gcatcttctt ggttgcgtgt cgtcttgcgc ttgagccccc acggcggggg cgtgggggtccc gactccgctc ggaacttctg gatatggccc ttctcatctt gcc-gcggctc cgggtctggcc tggcccggggg caaaggggcc ctggccccag cgcctggccgt gggccaattt gcaagctgtt ggaactgttca ttggcttggc ttgcgtgttg ccgcctct gggcgcgaaa gcc-gaagcgg ctgtaccctg ggttgccttac tgggtcttgg cgggtcaccc ctctctgtac ggggtcttgc agcgccctgt ggccttggca ctggggccgc ttatctggcc ttgactgtct ggaactgtgc ggggcttgac tccgcaaggc ttggcacccc ggggactctt gcaatgctc caagagacc ccagaggccc tggccgtaggc cttcttggg ctccagaaac gacccggg ttggcagagccc cgaatacag gggcacatg agagtctt ctctga
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1	MANSTGLNAS EVAAGSLGLL AA'VEV'GALL GNGALLVVVL RTPGLRDALY LAHLGVVDLL AAASIMPLGL LA'APP'GLGR VRLGPAPCRA ARFLSAALLP ACTLGVAAALG LARYRLNVHP LRPGSRPPPV LVLTA'VWAAA GLLGALSLLG PPPAPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYVGIFVVAR

628	190774	Histamine H4 Receptor	NM_021624	<p> RAALRPPRPARGSRLRSDSLDSRLSILPPLRPRLPGGKAA LAPALAVGQF AACWLPYGCA CLAPAARAAE AEAATVWVAY SAFAAHPFLY GLIQRPVRLA LGRLSRRALP GPVRACTPQA WHPRALLQCL QRPPEGPAVG PSEAPEQITPE LAGGRSPAYQ GPPESSLS ggaagactac acattttag taigatga gaaacatalc tgcicgctg gataatig claatigac ctctcalt attttagtg atgcagata claatagcac aatcaattia tcaataagca ctcgctgac tttagcatt ttatgctct tagtagctt tgcataatg ciaggaatg ctttggcat tttagcttt g'gggggaca aaacacttag acatcgagt agttatttt ttcttaact ggccatctt gactcttg tgggggagat ctccatct ttatcatcc ctacacagct gtgcgaatg gatttggaa aggaatctg tgaatttgg ctaciacctg actatctgt atgtacagca tctgtatata acattgtctt catcagctat galcgatalacc tgcagctc aaatgcttg tctatagaa ctacacatc tgggggcttg agattgtia ctctgaltg gggcgttgg g'gcttgctt tctatggtaa tggggcaatg attttagtt cagaactctg gaaggaagaa ggttagtgaat g'ggaacctgg atttttgc gaatggatca tcttgccat cacatctt ttgaatlog tgaatccagt catctagc gcttatca acatgaalat ttatggagc ctggggagc g'galtatct cagtagggc caaagccalc ctggagctgac tgcctctct tocaacatct g'ggagacalc attcagagggt agactatct caaggagatc tcttttgc tgcagagag ttcttgcalc ctctatca g'gagagacaga g'gagaaagag tagctctcag ttctcaca gaaccaagat gaatagcaat acaattgctt ccnaatggg ttctctcc caatcagatt ctggagctct tcaocaaagg g'gaalttg aatgcttag agccagagaa tttagcaagt cactggccat tcttagggg gttttgctg ttgctgggc tccatttct ctgttcaaa ttgctctt atttattcc tcaagcaacag gtctaaatc agtttggat agaatgcat ttggcttca g'ggttcaat tctttgtca atctcttt g'atccatg tgcacaagc gcttcaaaa ggccttctg aaaaatttt g'ataaaaaa gcaaccttca ccalcaaac acagctggc agtatctct taagacaat ttctacat ctgtaaatt tagcttcaat ctacctaaa tgaatcaggt ctgoccttia tcttgocct ttacttacc caacagatct gcaattgaa g'caalgga aattactca g'gaataata g'cagataat atgactgat aalatttgg taacttga g'caatagac tactatct tttagtcc tcaactct ctgtcttt agatctaat ttatgctga ttacaaaat cagtttgt ttctttia tgttccalc ataatacag cttaagtgaa ttctcttt taaatttt cgtaatagaa actattccag ttgaaatc attocctaaa gcatgcaata g'gaanaagaa ctctctggct g'gggactggcc aactctgtc tgcagtggt g'gggtgag taggtttga g'gttgcaga g'caggggaac g'gcatggcc caggtgagct cctgtgtgtg tccagattt alattctaa tccagtagag gaagaaagc taggtgtgga g'gagagagag ctgtatgactg cagttctca aggctctcag tgaagtatt tggggggcc tgggtgtcac aggtatcagaa g'gcaaggagat aggtcaggtt caccatgtt tgaaggtatg gcttgccca ttctcttg ttctcttt ctatgttca catcagctc ctttttgag aacatagaa agaaagaggc taagagatg tgaagagact gcaatgaa actagtaga cctgtgtatc agtcaatgaa ctatgtagag tcaataata ttatttaa aaatttt ttgtggcc g'ggcaggttgg ctacggctg aaatccag acttgggag acttggggtg g'cgggaltg aggcagagag atcgagacca tcttggccaa cagtgtgaaa cccatctgt actaaatc aaacaaatg ctgtgtgtg cgcggcagc ctgtatgcc agctatctgg g'ggctgaggg cagggggaat gcttgaacc g'ggagggcggaa gtttggccag cttggcaaca g'gagagact ctgtcaaaa agaaanaaa atttttgg tttagagagc alttctct gcttccagc ctggaggtgta g'aaatgcaat catgctcac tgcagctgg aactcttgg ctcaagcaat cctgtgtct tggcctcca agtatgtggg actacaggia ctgcacca cacttggata ataaanaa ttatttga g'agatgaat ctacatgtt tgcacagct g'gggtgcaat aatatttt taanaaaat tttaaaag gtttttgg acagatctt g'cttgcac caggtgtgga g'gagagtag atgtcagggg atcagcaca ccttgcct ctgggttcaa g'cgatcttg tgcctaaagc accagagag c'gggaggtg aggtgtgctg caccatgctt g'gcaattt g'gatttga g'gagagaga g'gtttgcca ttgggttca g'c'gggaatt ttttttt taatttga aagcaggggt attgctgt tggccagct g'gctcagac tcttgggctg aaacalct cccgtcttgg cctccaaag tcttggggt ataggcaca gacacaca taattatg ctgtatgca attatttt taanaatg ttgtattac ttatgtct taatgcaat gccaatatt ttactgtt actgtcaga g'gtatctt taatgtgg ttatgtagg ttatcttg ctgacgattc </p>	A	Homo sapiens
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629	190774	Histamine H4 Receptor	NP_067637.2	<p>acatttatt agtttggtta tttttgttgc tttaaaaaa ttttttttg agatgggggt ctgtcttgt tgcacagca ggaatgcagt ggcatgtctt cagctcactg cagccctgac tgcclaggct cagcaatct tctatgca gccctcagag tagctgggac cgaggact tgcacacag cccactaaa aatttttaa atttgtctt tcttgaagt gttctctgac tgtctttgc acaaaattc attttctta tagttaatt cactctocg gtaagtatt atttgttgt cttttaaac ttgcagtc ttacacggt tgggtattt calgtttct agaaactta aacctttaac ttcaaacatt aaaaataaag tcttttaagt acataatgac tagaaatgt acataatgt tatalacat tatgccttac attaaagtc aatatgaga atacatgtt aacattcaat aataattta aaaaattgag aataaactc tcaataaigc aaaaaaaaa aaaaaaaa</p>	P	Homo sapiens
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>MPDFTNSTNL SLSTRVTLAF FMSLVAFAIM LGNALVILAF VVDKNLRHRS SYFFLNLAIS DFFVGVISIP LYPHTLFEW DFKEICVFW LTTDYLLCTA SVYNVLISY DRYLSVSNV SYRTQHTGVL KIVTLMAVW VLAFLVNGPM ILVSESWKDE GSECEGFFS EWWYLAITSF LEFVIVLV AYFNMMNYWS LWKRDHLSRC QSHPGTLAVS SNICGHSFRG RLSRRSLSA STEVPASFHS ERQRRKSSLM FSSRTKMNSN TIASKMGFS QSDSVLHQR EHVELLRARR LAKSLALLG VFAVCWAPYS LFTIVLSFYS SATGPKSVWY RIAFWLQWFN SFVNPLL YPL CHKRFQKAF LKFCIKKQPL PSQHSRSVSS</p>	A	Homo sapiens
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>METNSSLPNTN ISGGTPAVSA GYLFDIITY LVFAVTFVLG VLGNGLVWV AGFRMTHVT TISYLNLA VA DFCFTSLPF FMVRKAMGGH WPFGWFLCKF VFTVDINLF GSVFLIALIA LDRVCVLP HP VWTQNHRTVS LAKKVIIGPW VMALELLTPV IIRVTVPGK TGTVACTFNF SPWTNDPKR INVAAMLTV RGIIRFIIGF SAPMSIVAS YGLIATKHK QGLKSSRPL RVLFSVAAR FLWSPYQVV ALIAVTRIRE LLQMYKEIG IAVDVTSALA FFNSCLNPM L VVFMGQDFRE RLIHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p>	P	Homo sapiens
632	190824	Formyl Peptide Receptor-like 2	NM_002030	<p>atggaaacca actctccat tctctgaat gaaactgagg aggtgtccoc tggacctgt ggccacacg tctctggat cttctattg A ctagtcacg gagtacact tgtctcggg gtcttggga atgggctgt gacttgggtg gcttggattcc ggaatgacg</p>	A	Homo sapiens

(FPRL2)

633 190824 Formyl Peptide NP_002021.2
Receptor-like 2
(FPRL2)

P Homo sapiens

cacagicaac accatcgtt acdgaacat ggccciagct gactctctt tcagtgccat cctaccatic cgaatggctt cagtgccat
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SAQTSNTHIT SASPPEITEL QAM

634 190948 EMR2 Hormone NM_013447
Receptor

A Homo sapiens

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635	190948	EMR2 Hormone Receptor	NP_038475.1	<p>agcaactcac tgcattcgca gcttcgctc tgcctctcc tggccacct cctctctc tggccaatg atcaaacggg acacaaggcg ctgtgclcca tcatcgccgg tacttgccac tatcttacc tggccacct cacttgatg ctgctggagg cccctgacct cttctcact gcaagggaac tgcctgggt caactacac agcatcaaca gattcagaa gaagctcatg ttccctgggg gctacggagt cccagctgtg acagtgagca ttcttgagc ctccaggct cactttatg gaacacctc ccgtgctgg ctccaaccag aaaaagggtt tatatgggg ttccctggag ctgtctggc cactctct gtaatttag ttctttct ggctgacttc tggatttga aaaaagact cttctctcc aatagtgaag tgcacacct cgggaacaca aggagctcgg catttaagc gacagctag ctgtctacc tggctgcac gctgtctg ggcattctgg aggtgggtcc ggcctccggg gctatggct acctctcac caatcaac agcctgcagg gctctcat ctctctggg tacttgctcc tgaagcagca ggctccgggag caataaggga aatgtgcaaa agggatcagg aaattgaaaa ctgagcttga gtagcataca ctctccagca gtgttaaggc tgcacctcc aaaaaccaga cgtttaacta gaaaaatct ctgaataaga tctctctct ttgctggggg aaaatctgaa caatcttga gccatctaga ggggaagaa aaagacttgt tctgttgt tcaagaat caccatgca gcaatagaa ggatgtatg gaagcgctc ttggcatca attctgcag aaaccggaaa tctccatg cctgaatgt gctcatcaaa ctctcagcat atggacgggc agctggggc cactatctg tcatctgaa gcacaaat taltgaagca tagaagctta agaccttt cacagctct cttcttaca aagactctc caaatctaa aatgaagcag gaaaacaagc ctgaaggagc ttcataccg acaacatcg aaaggactag aatgtca ccaagatcg gattcttaa ttttgtt ttgtttgt ttgtcttag ttctacgggt ttgtattt agctatga aaaaatga ttactcac atagatcaag agagacacgg ctctgctt calggagct ttgggggaaa atgaagggc tcttgagct agagttagt cagaagcga aattctaga aatcaggt ctactgctag gcaatgaaag tataactat ttataaca ctgtctct tcatctcac</p>	P	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	<p>MGRVFLVFL AFCVWLTLPG AETQDSRGCA RWCQDSSCV NATACRNPNG FSSFEIIT PMETCDINE CATLSKVSCG KFSDCWNTG SYDCVCSPGY EPVSGAKTFK NSENTQDV DECQNRLC KSYGTCVNLT GSYTCQLPG FKLKPDPKL CTDVNECTSG QNPCHSTHC LNNVGSYQCR CRPGWQPIPG SPNGPNTVC EDVDECSGQ HQDSSVCF NTVGSYSCRC RPYWKPRHGI PNNQKDVCE DMTFTWTP PGVHSQTLR FFDKVQDLGR DYKPLANNNT IQSILQALDE LLEAPGDLET LPRLQQHCV A SHLLDGLDVL RGLSKNLSN GLLNFSYPAG TELSLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPGPS VWGLVSPGM GKLLAEAPLV LEPEKQMLH ETHQGLLDQ SPILSDVIS AFLSNNDTQN LSPVTFIS HRSVPRQKV LCVFWEHQGN CGGHWATTGC STIGTRDTST ICRCTHLSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLC LLAALTELL CKAJNTSTS LHLQLSLCF LAHLLFLVAI DQGHKVLCS IIAGTLHYLY LATFTWMLLE ALYFLTARN LTVNYSIN RFMKKLMFPV GYGPAVTVA ISAA SRPHLY GTPSRCWLPQ EKGFIIWGLG PVCAIFSUNL VLFLVTILWIL KNRLSSLNSE VSLRNTRML AFKATAQLFI LGCTWCLGIL QVGPAA RVMA YLFTIINSLQ GVFI LAYCL LSQQVREQY KWSKGIRKLK TESEMHTLSS SAKADTSKPS TVN</p> <p>gcaattct cactacgt ggcctagga agccctct gaacttgc ttacttgt gctgggtt ctgcccatt ttctatlc ctctgacgc tgcaggga tctctgctt ggccttct caagcagaac aagtgagggc tctggaagg taaaggacc tcagtgcca ccaatctat tgcattct ctgagaagt gaggatgaa agggaaagcag gaagcccat ggtcagattg aaaggaggac tttaagtt ttttttt tttagaat ggaagctgc tctgcatc aggtggagt gcaaggggc gatctcagct cactgcagcc tccactct gggctacat gattctctg cctcagctc caagtagct gagaatagc gcaatgcca</p>	A	Homo sapiens

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ctgaagctg aa

637	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	•	P	Homo sapiens
638	191039	Trace Amine	AF380185	A		Homo

641	191132 G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	<p>goccgaaagc atttggagc gccaccgat tttaacctt ttttcttg ttttagaga atccaaagt caaacacca gagactgaa gaacttgcaa actggcggtt taaataacc ggtaattta ttccacaca gttgtttt gaataagagc ttccataatg tataacctt ttccatttca tggcttata taigaagcg cttgagtgf calgaacca aggaataac attgaagaag gaatacaata tgaagaagt atttagaaa gaacctgic tttagatg cttcttac catttatt ttgtatata cccggggca gtagagccot agggtggccc accagatga gtggccatta agacctgaag cccatttacc taaaagggt tttaataaa gctttctca aatggagtag aatctagcc agtgagaana azaattatt tatgtccctt tttttgca ccttaagac tgaataagg cgttagagt tatagtga atttccagt ttgaatag atggcagag ccaagcagg aatttgaaa acaataaagg ttattatca tttaggtac cgtttcacat ttttatagc atgcacact gtgtaccc tcaattga accaattat ttgctatg aatgtatg cagcttgaa cattctgac tgtaatgggt gctaagaaga ataatgctt cgttttct tttaacatt azaataatc aatgcacag atataatna acataatna ttaccatgact gcatagctaa tatagctgc tatgtatgc tcttagatgc tagaacttat tgggcatggt gtaactgaa gcatatcccg ttagacaagg atatttact tcttcagac accagaaga atggcttca attattgaa aagagacaca gagacacctc tggctaccta gagttcttc tgcctgacc aatttatgag aagctacca gtgggact tatctaca gtgggactac agtcaagag gatcaataat atgggtggct cagcaagacc agctgtgctc tttagaggt taaacaagcc acagttaga aagcaacact gttttatgt agtcalata tataccag acatttaca tcaatatt atattgaa gtaggtatna taaacacagt catataggt gaacagtca aatgggaaag tggttaaaa catattatt gaggttgic atattcat tggttact aaatttact agaatgcaa attgtgtgaa atcacttat caataaaa tgggaagaaa gtaattttaa taattttaa taatcatatg tcaagctatc gacttact cacatcaat ctggggccaa acagctcag ttaactgat aattcagaa caaacagc tgccttgt gcaagctgg gcaatttcag ccaggacatt aggaacctt gtgtacatc tgaataat tggagttgg gacatgtaa ggaatacaaa tatgtatc accaacaac agcttcatt tatattct atcccttg tcatgacc attctctc tactacagt tcatctgt cacatttc tgaatcaa tatnaagt cagaataaa aaaaaaaa aaaaaaaa aaaaaa</p>	P	Homo sapiens
642	191168 P2Y12 Platelet ADP Receptor	NM_022788	<p>lpgvgdaaaa avaatavpav sqaqlgtraa qohw ggctgcaata actactact actgatala ttcaacct ccagatcaa cagttatcag gtaaccaaa agaaatgcaa ggcgtgaca acctacac tggcctggg aacacagc tggacccag agactacaa ataccaggg tctcttccc actgtctac actgtctgt ttgttgg actatcaa aatggcctgg cgtaggat ttcttcaa atccggagta aalcaaac tatatttt ctlaagaca cagctatc tgaatctc atgattcga ctttccat caaatctt agtgaigcca aatggggaac aggacactg agaaatttg tggtaagt tactccgc atatttat tcaaatga tatcagtt tcatcttgg gactgataac tatcagtc taccagaaga ccaccagcc attaaaca tcaaccca aatatctt gggggcttag attctctg ttgcatcg ggcattcag tctactct ctgtctaa catgattc accaagcc agccagaga caagaatg agaaatgct ctctctaa atcagatc ggtctgctt ggcagaaat agtaattac atctgtcag tcttttgg gattaattc ttaattgta ttgtatgta tactactt acaaagaa tgaacctg atagtaaga acagggggg taggttaagt cccagagaa aaggtgaacg tcaaatgtt cattatct gctgattc ttattgtt tgtcttcc catttgccc gaattcctt caccctgag caaacccggg atgttttga ctgcactgt gaaatactc tgtctatgt gaaagagagc actctgtgt taacttct aatgcatc ctggatccgt tcatctatt ttcttgc aagcttca gaattctt gataagatg ctgaagtc ccaattcgc acaattcgc tccagagaca</p>	A	Homo sapiens

643	191168	P2Y ₁₂ Platelet ADP Receptor	NP_073625.1	<p>ataggaaaa agaacaggat ggaggagacc caaaggaaga gacccaatg taaacaaat aactaaggaa atattcaat ctcttggt tcaagaatcg ttaagcaaa gcgaatgaa aaaaataaa cgaacgaaga agcaataag taaataaa tgaactaaa gaacagaag atacaaga caatttcat ttacttcc agtaaaaa gcaactaa aataagaaa actaactaa actgagctg tattagcag aaaaacag ac</p> <p>MQAVDNL TSA PGNTSLCTRD YKIQVLFP LLYTVLFFVGL ITNGLAMRIF P Homo FQIRSKSNFI IFLKNIVISD LLMILTFPFK ILSDAKLGTG PLRTFVCQVT SVIFYFTMYI sapiens SISFLGLITI DRYQKTRPF KTSNPKNLLG AKLSVVIWA FMFLSLPNM ILTNRQPRDK NVKKCSFLKS EFGLVWHEIV NYICQVFWI NELIVVCYT LITKELYRSY VTRTGVGKVP RKKVNVK VFI IIAVFFICFV PFHFARIPYT LSQTRDVFDC TAENTLFYVK ESTLWLTSLN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT SLSQDNRRKE QDGGDPNEET PM</p>	A
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	<p>atggagaia atttccca agcagggt ggaggctgt gtaacagaa cgtgaacga tctgcatta aaactctta ctgcagggt cctcagacta tctciacgc ggccttggt ttggagcgt tgcggcagc gtttggaaac ttactgta tgaactat ccttcactc aaaaactgc acacacactac aaactttcgt atggcgtgc tggcgtgctc tgaacttctg gggagagca ctgagagcc cttcagaca gtagggtcgt tggagagcgt ttggtactt gggagacgt actglaaat ccalactgt ttgacacat ccttctgtt tcttctta ttacttat gctgactc tggtagaga taaatgctg ttactgtcc tctgactat ccaacaaat ttactgtc agttaagggt atagcatg ttcttctg gttcttct gtcacataa gcttttcat cttniacag gggagcaag aagaaggaa tgaagaata gtagtgctc taactgtgt aggaggtgc caggctccac tgaatcaaaa ctgggctta ctgtttc ttacttct tataccaat gtcgcaatgg tttttataa cagtaagaa ttttgggg ccaagcaat ggttaggaag atagaagaa cagcagcaaa agctcagtc tctcagaga gtaacagaa aagaagaa aaaaagagaa gaaaggctgc caaaccttg ggaaatgca tggcagcat ttgtgtct tggcactat acctgtga tgcagtgat gactgata tgaatttat aactctct taigtatg agatttatg ttggtgtt tattataat cagctatga cctcttgat tatgtctt ttactcaatg gtttgggaag gcaataaac ttatgtaag gggcaaggt taaagagctg atgcacac aactaattt ttctgag agtagagag agataa MVNFSQAEA VELCYKNVNE SCIKTPSPG PRSILYAVLG FGAVLAAFGN P Homo LLVMIALHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF sapiens GDSYCKFHTC FDTSCFASL FHLCCISVDR VIAVTDPLTY PTKFTVSUSG ICIVLSWFFS VTYSFSIFT GANEEGIBEL VVALTCVGGC QAPLNQNWVL LCFLFFIPN VAMVFIYSKI FLVAKHQARK IESTASQAQS SSESYKVERVA KRERKAAKTL GIAMAAFLVS WLPYLVDVI DAYMNFITPP VVYELVWCV YNNSAMNPLI YAFFYQWFGK AIKLIVSGKV LRTDSSTNL FSEEVETD</p>	P
646	191196	G Protein- Coupled Receptor GPR80	AF411109	<p>atgaatgagc cactagacta tttagcaaat gcttctgatt tcccagata tgcagctgt ttggaatg gactgagaa aaacalcca ctcaagatgc actactccc tttattat ggactatct tctctgagg atttcagc agtcagag ttgataccac ttactttt aaaatgagac cttagaagag cagcacaalc ataatgca acctgccgt cacaatcgt ctgatacga ccagctccc cttctgatt cactactat ctagtgga aaactggga ttggagat tcaatgaa gttatccg ttacgtcc attcaact • gtatagcag atctcttcc tcaacttct cagcatct cgcactgt tgaatcaca ccaatgagc tgcattcca ttcaaaaa tctatgca gtttagct gtcgtgtt gtagcatc ttactgtag ctgctgag gtagcctc ttgatacat caaccaacag gaaccaaga ttagcctc tgaactcac cagttcagat gaactcaata ctataaggt gtaacactg atttgactg caactatt ctgctcccc ttggtatag tgaacttg ctataccag ataatcaca ctctgacca tggcagcaaa actgacagct gcttaagca gaagaacaga aggttaacca ttctctact ccttgatt ttactgt ttactct cactatctg aggtcaltc ggaatgaa tgccttgct tcaatcgt gttcaatga gaatcagatc catgaact acatgttct tagaccata gctgctctga acaactgg</p>	A

647	191196	G Protein-Coupled Receptor GPR80	CACS1133.1	taacctgtta ctatattgg ttgtcagcga caactttcag caggcgtgtct gctcacagt gagatgcaca gtaagcggga accttgagca agcaaaagaa atagttaact caaacaacc tga MNEPEDYLAN ASDPDYAAA FGNCTDENP LKMHYLPVY GIIFLVGFPG NAVIMTYIF KMRPWKSTTI IMNLACTDL LYL TSLPFLI HYYASGENWI FGDFMCKFIR FSHFENLYSS ILFL TCFSEF RYCVIHPMS CFSHKTRCA WVACAVVWII SEVAVPMIF LITSINRINR SACLDTSSD ELNLIKWNLL ILTATTFCLP LVIVTLCYTT IHTLTHGLQ TDSCLKQKAR RL TILLALLAF YVCFLPFHIL RVIRIESRL SISCSTENQI HEAVTSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataatg actaatatc ttaagctc tgaattcic tccgtaaaa caggcggggg aataccaca taacaggcig A gicagtgaana tcaigtgaaca tgcagcagggt gctcaagict tgttttgt tccaggggga ccagtgaggg ttctggagc atggalocaa ccaccgggc ctgggggaaca gaaggaaca cagfgaatgg aaatgaacca gcoctcttc tcttggtgg caaggagacc ctgactcccgg tctctgat ccttticat gcoctggcgg ggcctggtagg aaacgggttt gctcctggc tccctgggtt ccgcattggc aggaaagcct tctctgcta cgtctcagc ctggccgggg ccgacttct cttctctgc tccaagatta taattgctt ggtgacctc agtaactct tctgttcat cttcatcat tccctagct tctaccac tggatgacc tggcctacc tgcaggcct gaggcaltcg agcacctga gcaccggcg ctgctgtcc gctctgggc ccatctgta tgcctggcc gcccaccag accgtgcagc ggctggtgt gctgctct gggccctgt octactgctg agcatctgg aagggaagt ctgtggctt ttattggtg atgtgactc tgggtgggt cagacttg attcatc tgcagcggg ctgatttt tattcattg tctctgggg tccagctgg ccctgggt caggatctc tgggtcca ggggtctgccc actgaccagg cgtactga ccatctgct cacagtcig gttctcc tctgggct gcocttggc attcaggt tctaatatt atggactgg aaggattct gttcttatt ttgtattat catcagtt cagttgct gctatctt aacagcag ccaaccat catctact tctgtgggt cttaggaa gcagtggcgg ctgcagcagc gcactcaaa gctggctc cagaaggctc tgcagagcat tgcigagggt gactcaggt aaggatctt ccgtcaggcc accgcgaga tgcctggag cagctgggt tagagatga cagcctcac ttcacaga tatagtggc ttgagaggc aactggcc ctgtctgt gatttga acttctag tctgattt aaacagta agagatct tggaggat aagttagaca MDPTTAWGT ESTVNGNDQ ALLCGKET LPVFLIFI ALVGLVNGF P VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQINCLVYL SNFFCSIN FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPHLSAVVC VLLWALSLL SILEGKFCGF LFSDGDSGWC QTDFDITAAW LIFLVMVLCG SSLALLVRL CGSRGLPLTR LYL TILLTVL VFLCGLPFG IQWFLIWIW KSDSVLFCHI HPVSIVLSSL NSSANPIYF FVGSFRKQWR LQQPILKAL QRALQDIAEV DHSEGCFRQG TPMSRSSLV tcatatct gactatct ttgaggcaa agtttagat acactgtgg catcttccct gcatatgt gcaaatgt ggcctggaag atcttgct ttctgcagg ttgcagctt ggcactagag ctgggattgg tcaattgac atggcgtc atggagcca gfgaagcagg actcaggcca agcgtcca cactatgga agataactg tagatcat tggaaaggc agacttggt ttaactct gctacaat aataacatag catgtgggga tgaatgcca atacaggtt ccatgttag ataatat gacataatc tccacagctg gtacatct gccaatgt gtagcataga taggggga tggatcca gctatgaagt aaatgagcat gccaatgta atgaattgg ctcattgta attcatat ttgcttga aaggcaat gaagcaaat aaggcaggga tggcaatgta gcccagcatg gtgocaaatg caagtatga tcccttca cactcaggga tgaatctct gggcaggag aataaccat ctacagtagg tgcgczaag atagccaga gttgcaat gacaacctg algcccggtc aggtgaagt aataaggatc ggtctataga ggcactcag aaatttgt aatttgggt caaagctga ggtagcaaa attttcagaa acttcgcaaa aalgcaggag atgcaaaag tagagctac tccaacatt gttcgtcgg ttatcatgt gtagtctgt gttcttcca tgaataagct cgtgtggga	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214		Homo sapiens
649	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1		Homo sapiens
650	191222	G Protein-Coupled Receptor Ls191222	LG94359		Homo sapiens

651	191222	G Protein-Coupled Receptor Ls191222	ENSP000001199 719	QTLAMHSIE MINNSTLLPG VKLGYEINYDT CTEVTVAMAA TRLFLSKFNC SRETVEFKCD YSSYMPRVKA VIGSGYSEIT MAVSRMLNLQ LMPQVGYEST AEILSDKIRF PSFLRTPSD FHQKAMAH LQKSGWNWIG ITTDDDDYGR LALNTFIQA EANNVCIAFK EVLPALFSDN TIEVRINRL KKILEAQVN VIVFLRQFH VFDLFNKAE MNINKMWIAS DNWSTATKIT TIPNVKKIGK VVGAFRRGN ISSFHSFLQN LHLLPSDSHK LLHEYAMHLS ACAYVKDITDL RLJHSIQLAV FALGYAIRDL CQARDCQPN AFQWELLGV LKNVTFIDGW NSFHDAHGD LNTGYDVVLW KEINGHMTVT KMAEYDLQND VFIPDQETK NEFRNLKQIQ SKSCSECSGP QMKKTTIRSQH ICCYECQNCPEHNYTNQIDM PHCLLCNNKT HWAPVRSTMC FEKEVEYLNW NDSLAILLI LSLGLIIF VL VVGIIPTRLNTPVKSSGGERVCYVILL HFLNFASTSF FIGEPQDFTC KTRQTMFGVS FILCSILT KSLKILLAFS FDPKLQKFLK CLYRPLIIF TCTGIQVVIC TLWLFAAPT VEVNVSIPRV ILECEEGSI LAFGTMLGYI AILAFTQFIF AFKGYENYN EAKFITGML IYFIAWITFI PIYATTFGKY VPAVEIIVIL ISNYGILYCT FPKCYVNIC KQEINTKSAF LKMIYSYSSH SVSSI	P	Homo sapiens
652	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	NM_032571	tttctgagc taggaaggtt ggttgctta cggcacagta gagagcttcc gggcgggtt ggcgtggat acccgaacca cagaatagca gggaccattg ctcttcacg gctctgctt tctgtgagc ctcttgagc ctttgagca gaaacacaa actctctgtg ctaagtgccc cccaatgct tctgtgta ataacatca ctgcaactgc aacatgagc atactctgag tcttgggcag aaactatca cattccctt gggagacgt aacgacatca atgaatgac accacoccat agtgaatatt gtegatuaa cgtctgtgtg tacaatgtg aagggaagtt ctactgtcaa tgtgtccag gatatagact gcaatttggtt aatgaacat tcaatgaac caatgaac acctgtcagg acaccactc ctcaagaca accgaggagca ggaagagact gcaaaagatt gggacaaat ttgagtcact tctaccaat cagactttat ggaagacaga agggagacaa gaaatcicat ccacagctac cactatctc cggggatgtg aatgaaagt tctgaaact gcttgaaag atcagaaca aaaaagctcag aaaaaccaaa acgagatgt agctatgaa actcaagca ttacagaca ttgtctgaa gaaagaaaga catcaactt gaaacttcaa atgaactcaa tggacatcog ttgagtgac atcaaccag gagacaca aggtccaggt gcaatgctt ttactcata ttctctctt ggaacatca taaatgaac ttttttgaa gagatggata agaaagatca agtgtatctg aacttcagg ttgtgagtg cttctgtgtg cttctgtgtg ctccaagttt gtagagctga ctccacaga cgtgaaagt accccagta ccaaaaggt cttctgtgtg tacttggaaga gcacaggca ggggaagcag tggccaagggt atggctgtt cctgatacac gtagaaca gtagaaca gtagaaca agtcaactgt ccagcttgc tgtctgag gacctgaca gcaaggagga ggaatccgtg ctgactgtca tcaactatgt ggggctgagc gttctctgtc tggctctct cctggcggcc ctactttc tctgtgtaa agccatccag aacacagca cctcactgca tctgacagctc tggctctgccc tttctggc ccaactctc ttctctgtg ggaatgagc aactgaacc aagggtgtgt gctccatcat cgcgggtgt ttgactatc tctactgtc cgccttacc tggagctacc tggagctgt gcaactctc ctactgtc ggaacctgac agtgggtcac tactcaaga tcaatagact catgaatgg atcatgtcc cagtggtgca tggcgttccc gctgtgactg tggccattc tgcagctccc tggcctccc ttatggaa tgcgtgagca tgcgtgctcc acctggacca gggaatcag tggagtttcc ttggccaggt ctgtgtccatt ttctctgga attagtati gttatctg gtttttga ttgtgaaag aaaacttcc tccctcata gtagaggtc aacctccag aacacagga tgcgtgtt caaagcaaa gctcagctct tcatctggg ctgacatgg tgcgtgggt gggccaaggt gggccaaggt gggccaaggt gggccaaggt gggccaaggt	A	Homo sapiens

Accession	Gene	Protein	Receptor	Sequence	Species
653	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	NP_115960.1	<p>MQGPILLPLGL CFLSLFGAV TQKTKTSKAC CPNASCNN THCTCNHGYT</p> <p>SGSGQKLFTF PLETNDINE CTPPYSVYCG FNAVYNVEG SFYQCQVPGY</p> <p>RLHSGNEQFS NSNENTCQDT TSSKTTGRKK ELQKIVDKFE SLLTNQILWR</p> <p>TEGRQEISST ATTILRDVES KVLETALKDP EQKVLKIQND SVALETQAIT DNCSEERKTF</p> <p>NLNVQMNSMD IRCSDIIQGD TQGPSALAFI SYSSLGNIIN ATTFEEMDKK</p> <p>DQVYLNQVYV SAAIGPKRNV SLKSQVLTFF QHVKMTPTSK KVFCVYWKST</p> <p>QQGSQWSRDG CFLIHVNKSH TMCNCSHLSS FAVLMALTSQ EEDPVLTVIT</p> <p>YVGLSVSLCL LLLAALTFLL CKAIONTSLS LHLQLSLCLF LAHLLFLVGI</p> <p>DRTEPKVLCS IIAAGALHYEY LAAFFWMLIE GVHLFTARN LTVVNYSSIN</p> <p>RLMKWIMFPV GYGVPATVVA ISAAWPHLY GTADRCWLHL DQGFMSWFLG</p> <p>PVCAIFSANL VLFILVFVIL KRKLSSLNSE VSTIQNTRML AFKATAQLFI</p> <p>LGCTWCGLGL QVGPAQAQVMA YLFTIINSLQ GFFIELVYCL LSQQVQKQYQ</p> <p>KWFEIRVSKS SESEYFTLSS KMGPDSPSE GDVFPQVKR KY</p> <p>KHAYICLAAI WAYASFVTTM PLVGLGDYYP EFPFGTSCITL WWLAQASVGG</p> <p>QVFILNILFF CLLLPTAVIV FSYVKIAKV KSSKEVAHF DSRHSHSVL EMKLTKVAML</p> <p>ICAGFLIAWI PYAVVSVWSA FGPRDPSIQ LSVVPTILLK SAAMYNPIIY</p> <p>QVIDYKFACC QTGGLKATKK KSLEGRFLHT VTVYRKSSAV LEIHEEV</p>	Homo sapiens
654	193516	G Protein-Coupled Receptor d1402H5.1	CAC21687.1	<p>agcgaacat cggggcgggc ggagagcatg ttgagcgagc ggagagcagc agcagcgctg gggatgctgt ggtggggggc</p> <p>gaaaaagca gggcgcgacg cggagggggc lccggcgcg gagtatagg tgcacagag gggcgggggg tggggaaga</p> <p>cagcgcgagg gggcgggggc cggggcgggc gcaaggggcc ggaggggggg ccgagcgggc gggcgagcc</p> <p>aaaggccgga ccgggggggg gggcggggga gggcgggcag gtagggggga gtagggggc agggggggc</p> <p>cggggggg ctcggggga cggcgagcc ccatactct gctctctc tctcttgt tccctcag ccagagagag</p> <p>ctgggggggg ggggggacca gggcgggag ccaggcttag ctgcacac gggggcgagg ggcatalicg gggggggg</p> <p>cttagctct tgcgggag cttcgggg cagggagagat gggggggctg gcttggggg cagggggct atctcggg</p> <p>ggctcgagg gagaaggcaa agcgccgga atagtcagg gccccttag cagcggaag agggagcgg gattgaacac</p> <p>ggcgccagc catgggag ccgggaacga gacacagagc agggacaggg gcttggtta tactggcg cagggcttc</p> <p>ctcttgggg gggacagagac ctggcaag aggtatctg tcaacagggg ctctgtctc aggggggggg ggtcggggga</p> <p>acagctgcc cctccctca gacttttga ttgggacca cgggtcccaa cgggtctct cccagcgaaa cgtcgggaca</p> <p>ggctcccgca aagagtgggg caccggcg tgcgtgggg aattatggc aacagggagc aagggctagg gggagagagc</p> <p>cacgacatcc ggagcagaaa agcagtcctg atcaggttc agcacccgc gggcgctggg atctggccc gaggctgalt</p> <p>cagcacacag cagcgagg acagctctg catcaggttc agcacccgc agctcccgga cagctccgg cggcgccc</p> <p>aagcgctgc gctccgggg tctctcgg tcccgcttc tcccgagc cccggggcg cgtcccccgg gactccggc</p> <p>cggtctgaaa ggcaggaaaag taactcggc gaacggggca cgtcttcg cggcgcaaaa ccggcacccc cagttccgc</p> <p>agtaacacia ccagagctg gggcgaggaa aggaaggcagc aggcacccg gggciacggg tggatgctca gggacgggac</p> <p>ggcgcgagg ccgggggctt agctactg cggggggcac tcatgaacag ccgctcggg gaggcttca gcatggacc</p>	Homo sapiens
655	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NM_001407	<p>agcgaacat cggggcgggc ggagagcatg ttgagcgagc ggagagcagc agcagcgctg gggatgctgt ggtggggggc</p> <p>gaaaaagca gggcgcgacg cggagggggc lccggcgcg gagtatagg tgcacagag gggcgggggg tggggaaga</p> <p>cagcgcgagg gggcgggggc cggggcgggc gcaaggggcc ggaggggggg ccgagcgggc gggcgagcc</p> <p>aaaggccgga ccgggggggg gggcggggga gggcgggcag gtagggggga gtagggggc agggggggc</p> <p>cggggggg ctcggggga cggcgagcc ccatactct gctctctc tctcttgt tccctcag ccagagagag</p> <p>ctgggggggg ggggggacca gggcgggag ccaggcttag ctgcacac gggggcgagg ggcatalicg gggggggg</p> <p>cttagctct tgcgggag cttcgggg cagggagagat gggggggctg gcttggggg cagggggct atctcggg</p> <p>ggctcgagg gagaaggcaa agcgccgga atagtcagg gccccttag cagcggaag agggagcgg gattgaacac</p> <p>ggcgccagc catgggag ccgggaacga gacacagagc agggacaggg gcttggtta tactggcg cagggcttc</p> <p>ctcttgggg gggacagagac ctggcaag aggtatctg tcaacagggg ctctgtctc aggggggggg ggtcggggga</p> <p>acagctgcc cctccctca gacttttga ttgggacca cgggtcccaa cgggtctct cccagcgaaa cgtcgggaca</p> <p>ggctcccgca aagagtgggg caccggcg tgcgtgggg aattatggc aacagggagc aagggctagg gggagagagc</p> <p>cacgacatcc ggagcagaaa agcagtcctg atcaggttc agcacccgc gggcgctggg atctggccc gaggctgalt</p> <p>cagcacacag cagcgagg acagctctg catcaggttc agcacccgc agctcccgga cagctccgg cggcgccc</p> <p>aagcgctgc gctccgggg tctctcgg tcccgcttc tcccgagc cccggggcg cgtcccccgg gactccggc</p> <p>cggtctgaaa ggcaggaaaag taactcggc gaacggggca cgtcttcg cggcgcaaaa ccggcacccc cagttccgc</p> <p>agtaacacia ccagagctg gggcgaggaa aggaaggcagc aggcacccg gggciacggg tggatgctca gggacgggac</p> <p>ggcgcgagg ccgggggctt agctactg cggggggcac tcatgaacag ccgctcggg gaggcttca gcatggacc</p>	Homo sapiens

[illegible]

[illegible]

1. 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827 2828 2829 2830 2831 2832 2833 2834 2835 2836 2837 2838 2839 2840 2841 2842 2843 2844 2845 2846 2847 2848 2849 2850 2851 2852 2853 2854 2855 2856 2857 2858 2859 2860 2861 2862 2863 2864 2865 2866 2867 2868 2869 2870 2871 2872 2873 2874 2875 2876 2877 2878 2879 2880 2881 2882 2883 2884 2885 2886 2887 2888 2889 2890 2891 2892 2893 2894 2895 2896 2897 2898 2899 2900 2901 2902 2903 2904 2905 2906 2907 2908 2909 2910 2911 2912 2913 2914 2915 2916 2917 2918 2919 2920 2921 2922 2923 2924 2925 2926 2927 2928 2929 2930 2931 2932 2933 2934 2935 2936 2937 2938 2939 2940 2941 2942 2943 2944 2945 2946 2947 2948 2949 2950 2951 2952 2953 2954 2955 2956 2957 2958 2959 2960 2961 2962 2963 2964 2965 2966 2967 2968 2969 2970 2971 2972 2973 2974 2975 2976 2977 2978 2979 2980 2981 2982 2983 2984 2985 2986 2987 2988 2989 2990 2991 2992 2993 2994 2995 2996 2997 2998 2999 3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011 3012 3013 3014 3015 3016 3017 3018 3019 3020 3021 3022 3023 3024 3025 3026 3027 3028 3029 3030 3031 3032 3033 3034 3035 3036 3037 3038 3039 3040 3041 3042 3043 3044 3045 3046 3047 3048 3049 3050 3051 3052 3053 3054 3055 3056 3057 3058 3059 3060 3061 3062 3063 3064 3065 3066 3067 3068 3069 3070 3071 3072 3073 3074 3075 3076 3077 3078 3079 3080 3081 3082 3083 3084 3085 3086 3087 3088 3089 3090 3091 3092 3093 3094 3095 3096 3097 3098 3099 3100 3101 3102 3103 3104 3105 3106 3107 3108 3109 3110 3111 3112 3113 3114 3115 3116 3117 3118 3119 3120 3121 3122 3123 3124 3125 3126 3127 3128 3129 3130 3131 3132 3133 3134 3135 3136 3137 3138 3139 3140 3141 3142 3143 3144 3145 3146 3147 3148 3149 3150 3151 3152 3153 3154 3155 3156 3157 3158 3159 3160 3161 3162 3163 3164 3165 3166 3167 3168 3169 3170 3171 3172 3173 3174 3175 3176 3177 3178 3179 3180 3181 3182 3183 3184 3185 3186 3187 3188 3189 3190 3191 3192 3193 3194 3195 3196 3197 3198 3199 3200 3201 3202 3203 3204 3205 3206 3207 3208 3209 3210 3211 3212 3213 3214 3215 3216 3217 3218 3219 3220 3221 3222 3223 3224 3225 3226 3227 3228 3229 3230 3231 3232 3233 3234 3235 3236 3237 3238 3239 3240 3241 3242 3243 3244 3245 3246 3247 3248 3249 3250 3251 3252 3253 3254 3255 3256 3257 3258 3259 3260 3261 3262 3263 3264 3265 3266 3267 3268 3269 3270 3271 3272 3273 3274 3275 3276 3277 3278 3279 3280 3281 3282 3283 3284 3285 3286 3287 3288 3289 3290 3291 3292 3293 3294 3295 3296 3297 3298 3299 3300 3301 3302 3303 3304 3305 3306 3307 3308 3309 3310 3311 3312 3313 3314 3315 3316 3317 3318 3319 3320 3321 3322 3323 3324 3325 3326 3327 3328 3329 3330 3331 3332 3333 3334 3335 3336 3337 3338 3339 3340 3341 3342 3343 3344 3345 3346 3347 3348 3349 3350 3351 3352 3353 3354 3355 3356 3357 3358 3359 3360 3361 3362 3363 3364 3365 3366 3367 3368 3369 3370 3371 3372 3373 3374 3375 3376 3377 3378 3379 3380 3381 3382 3383 3384 3385 3386 3387 3388 3389 3390 3391 3392 3393 3394 3395 3396 3397 3398 3399 3400 3401 3402 3403 3404 3405 3406 3407 3408 3409 3410 3411 3412 3413 3414 3415 3416 3417 3418 3419 3420 3421 3422 3423 3424 3425 3426 3427 3428 3429 3430 3431 3432 3433 3434 3435 3436 3437 3438 3439 3440 3441 3442 3443 3444 3445 3446 3447 3448 3449 3450 3451 3452 3453 3454 3455 3456 3457 3458 3459 3460 3461 3462 3463 3464 3465 3466 3467 3468 3469 3470 3471 3472 3473 3474 3475 3476 3477 3478 3479 3480 3481 3482 3483 3484 3485 3486 3487 3488 3489 3490 3491 3492 3493 3494 3495 3496 3497 3498 3499 3500 3501 3502 3503 3504 3505 3506 3507 3508 3509 3510 3511 3512 3513 3514 3515 3516 3517 3518 3519 3520 3521 3522 3523 3524 3525 3526 3527 3528 3529 3530 3531 3532 3533 3534 3535 3536 3537 3538 3539 3540 3541 3542 3543 3544 3545 3546 3547 3548 3549 3550 3551 3552 3553 3554 3555 3556 3557 3558 3559 3560 3561 3562 3563 3564 3565 3566 3567 3568 3569 3570 3571 3572 3573 3574 3575 3576 3577 3578 3579 3580 3581 3582 3583 3584 3585 3586 3587 3588 3589 3590 3591 3592 3593 3594 3595 3596 3597 3598 3599 3600 3601 3602 3603 3604 3605 3606 3607 3608 3609 3610 3611 3612 3613 3614 3615 3616 3617 3618 3619 3620 3621 3622 3623 3624 3625 3626 3627 3628 3629 3630 3631 3632 3633 3634 3635 3636 3637 3638 3639 3640 3641 3642 3643 3644 3645 3646 3647 3648 3649 3650 3651 3652 3653 3654 3655 3656 3657 3658 3659 3660 3661 3662 3663 3664 3665 3666 3667 3668 3669 3670 3671 3672 3673 3674 3675 3676 3677 3678 3679 3680 3681 3682 3683 3684 3685 3686 3687 3688 3689 3690 3691 3692 3693 3694 3695 3696 3697 3698 3699 3700 3701 3702 3703 3704 3705 3706 3707 3708 3709 3710 3711 3712 3713 3714 3715 3716 3717 3718 3719 3720 3721 3722 3723 3724 3725 3726 3727 3728 3729 3730 3731 3732 3733 3734 3735 3736 3737 3738 3739 3740 3741 3742 3743 3744 3745 3746 3747 3748 3749 3750 3751 3752 3753 3754 3755 3756 3757 3758 3759 3760 3761 3762 3763 3764 3765 3766 3767 3768 3769 3770 3771 3772 3773 3774 3775 3776 3777 3778 3779 3780 3781 3782 3783 3784 3785 3786 3787 3788 3789 3790 3791 3792 3793 3794 3795 3796 3797 3798 3799 3800 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810 3811 3812 3813 3814 3815 3816 3817 3818 3819 3820 3821 3822 3823 3824 3825 3826 3827 3828 3829 3830 3831 3832 3833 3834 3835 3836 3837 3838 3839 3840 3841 3842 3843 3844 3845 3846 3847 3848 3849 3850 3851 3852 3853 3854 3855 3856 3857 3858 3859 3860 3861 3862 3863 3864 3865 3866 3867 3868 3869 3870 3871 3872 3873 3874 3875 3876 3877 3878 3879 3880 3881 3882 3883 3884 3885 3886 3887 3888 3889 3890 3891 3892 3893 3894 3895 3896 3897 3898 3899 3900 3901 3902 3903 3904 3905 3906 3907 3908 3909 3910 3911 3912 3913 3914 3915 3916 3917 3918 3919 3920 3921 3922 3923 3924 3925 3926 3927 3928 3929 3930 3931 3932 3933 3934 3935 3936 3937 3938 3939 3940 3941 3942 3943 3944 3945 3946 3947 3948 3949 3950 3951 3952 3953 3954 3955 3956 3957 3958 3959 3960 3961 3962 3963 3964 3965 3966 3967 3968 3969 3970 3971 3972 3973 3974 3975 3976 3977 3978 3979 3980 3981 3982 3983 3984 3985 3986 3987 3988 3989 3990 3991 3992 3993 3994 3995 3996 3997 3998 3999 4000 4001 4002 4003 4004 4005 4006 4007 4008 4009 4010 4011 4012 4013 4014 4015 4016 4017 4018 4019 4020 4021 4022 4023 4024 4025 4026 4027 4028 4029 4030 4031 4032 4033 4034 4035 4036 4037 4038 4039 4040 4041 4042 4043 4044 4045 4046 4047 4048 4049 4050 4051 4052 4053 4054 4055 4056 4057 4058 4059 4060 4061 4062 4063 4064 4065 4066 4067 4068 4069 4070 4071 4072 4073 4074 4075 4076 4077 4078 4079 4080 4081 4082 4083 4084 4085 4086 4087 4088 4089 4090 4091 4092 4093 4094 4095 4096 4097 4098 4099 4100 4101 4102 4103 4104 4105 4106 4107 4108 4109 4110 4111 4112 4113 4114 4115 4116 4117 4118 4119 4120 4121 4122 4123 4124 4125 4126 4127 4128 4129 4130 4131 4132 4133 4134 4135 4136 4137 4138 4139 4140 4141 4142 4143 4144 4145 4146 4147 4148 4149 4150 4151 4152 4153 4154 4155 4156 4157 4158 4159 4160 4161 4162 4163 4164 4165 4166 4167 4168 4169 4170 4171 4172 4173 4174 4175 4176 4177 4178 4179 4180 4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 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4397 4398 4399 4400 4401 4402 4403 4404 4405 4406 4407 4408 4409 4410 4411 4412 4413 4414 4415 4416 4417 4418 4419 4420 4421 4422 4423 4424 4425 4426 4427 4428 4429 4430 4431 4432 4433 4434 4435 4436 4437 4438

P Homo sapiens

656 193524 Cadherin EGF NP_001398.1
LAG Seven-Pass
G-Type Receptor
3 (CELSR3)

gcaaaaggag cagaacaag ggaattcaag accagaatg taggigccac tgcctcciat gttacaggga tccctcgigg
ccctaggcac ctagggcgca ggaagtgaat cgttccatct cctcttatt tcccttaaaa agggaaaaat gactgtacg
accctgttca caaactctt actttgtcgc ttgttcgac tgcctagaac tgaagacttt aaaaatttgt tactgtttac aagtcagat
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ctctaacac gggggagagt ggcgtgac ggcgtggggg tggctgtgc agacaccc tcaaccacca cccatgcat
actcttgga agcagcttc tggagatta gaaattctac tccctgact ggagctaaat cccaccagc aggaccacaaa
ctctccctac cgagaaggac ccaagctct gaaggcctga gggcctgct ggggggggga ggggtctt actatgctt
aggcttgta gatcccttc tctggggtc cctctcca gccacggc cctcttctt gctgtgttaa atgttccgt gaagccgagc
tctgtttgg gaataaact ctatgaaa caaaa

MMARPPWRG LGERSTPILL LLLLSLFLS QEELGGGGHQ GWDPGLAATT
GPRAHIGGGA LALCPSSGV REDGGPGLGV REPIFVGLRG RRQSARNRG
PPEQNEELG IEHGVQPLGS RERETGQPG SVLYWRPEVS SCORTGPLQR
GSLSPGALSS GVPGSNSP LPSEFLRHH:GPKPVSSQRN AGTGRKRVG
TARCCGELWA TGSKGQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR
TARTAPASGS APRESRTAPE PAKRMRSRG LFRCRFLPQR PGRPPGLPA
RPEARVTSANRARRRAAN RHPQFPQYNY QTLVPENEAAT GIAVLRVVAQ
DPDAGEAGRL VYSLAALMNS RSELEFSIDP QSGLRTAAA LDRESMERHY
LRVTAQDHGS PRLSATMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY
PILQLRATDG DAPPNANLRY RFVGPAAARA AAAAFEDP RSLISTSCR
VDREHMESE LVVEASDQEQ EPGRSATVR VHTVLDEND NAPOFSEKRY
VAQVREDVRP HTVVLVRVTAT DRKDKANGLV HYNISGNSR GHFAIDSLTG
EIQVVAFLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDINDHIPI FVSTPFQVSV
LENAPLGHVS JHIQAVDADH GENARLEYSI TGVA PDTFFV INSATGWVSV
SGPLDRESVE HYFFGVVEARD HGSPLLSASA SVTVTVLDVN DNRPEFTMKE
YHLRLNEDAA VGTSVSVTA VDRDANSAS YQITGGNTRN REAISTQGGV
GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHNITD ANTHRPVFQS
AHYSVSVNED RPMGSTIVVI SASDDVGEN ARITYLLEDN LPQFRDADS
GATLQAPLD YEDQVYTLA ITARDNGIPQ KADTTYVEVM VNDVNDNAPQ
FVASHYTGLV SEDAPPTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF
TIEPTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV
NDNAPVFAE EFEVRVKENS IVGSVVAQIT AVDPDEGPN HIMYQIVEGN
IPELFQMDIF SGELTALIDL DYEARQEVVI VQATSAPLV SRATVHVRV
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ERGNELQLLV VNOQTSSELRL SRKLDNNRPL VASMLVTVD GLHSVTAQCV
LRVVIITEEL LANSITVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV
FIFNIQNDID VGGTVLNVSF SALAPRGAGA GAAGPWESSE ELQEQLYVRR
AALAARSLD VLPFDNNVCL REPCENYMKC VSLRFDSSA PFLASASTLF
RPIQPIAGLR CRCPGFTGD FCETELDLCY SNPCRNNGGAC ARREGGYTCV

DTEAGRCV PGVCRNGGTC TDAPNGGRC QCPAGGAFEG
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 QVRLTYST GESNTVVSTP VPGGLSDGQW HTVHLRYNKK
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 SVTVTRGS GRASHLLLDQ VTVSDGRWHD LRLELQEEFG
 LDFSLFQDT MAVGSELQGL KVQLHVGLL PPGSABEAPQ
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 GVAELLFL LGIHRTHNQL VCTAVAILLH YFELSTFAWL
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 SERLLTHP KDVDGNDLLS YWPALGECEA APCALQTWGS
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 EVPRSEG HS
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 tgg tctgtcat cgtgtcaag aaccggcaca tgcatactg caccaacatg tcatoccta

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658 193914 Neuropeptide FF NP_071429.1
1 Receptor

accctggctgt cagtgaccctg ctgggggggca tctctgcat gccaccacc ctgttgagca accatcatc tgggtggccc
ttcgacaatg ccacatgcaa gataggccgc ttgggtcagg gcatgtctgt gtcggcttcc gttttcacac tgggtggccat
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aaacccagta gctatgtt acagcaata aagaataatt tagtaatta aaaaaaaa aaaaaaaa aaaaaaaa
aaaaaaa aaa

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659 194319 G Protein- NM_025048
Coupled Receptor
FLJ22684

660	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	194319	MKVGVWLWLS FFTFTDGHGG FLGKNDDIKT KKLIVNKKK HLGPEVEYQL LQVTVYRDSK EKRLRNFLK LKPPLLWSH GLIRIRAKA TIDCNSLNGV LQCTCEDSYT WFPSPCLDPQ NCYLHTAGAL PSECHLNNL SQSVNFCERT KIWGTFKINE RFTNDLLNSS SAIYSKYANG IEIQLKKAYE RIQGFESVQV TQFRMSLLSP KLECNGTI	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	194431	ataggttctt gcaacttca acatggccac ttgtgctta ttggtatccc aggtatagag aagagccatt ttgggttgg cttcccttc ctttccattg atgtgtggc aatgttggc aactgcatcg tggcttcat cgtatggagc gaacgagcc tgcagctcc gaagacctc ttcttgca tgcctgagc catgactg gctttatca catccacct gcttaagatc ctggccctt ttgttttga ttcccgagag attagcttg aggcctgt taccagag ttcttattc atgccccttc agccatgaa tccaccatc tgcgggcat ggcctttgac cgtatgtgg ccactggc ccactggc catgctgag tgcatacaa taccataaa gccagattg gcatgtggc tgggtccgc ggaaccttc ttutccc acgtccctg cgtatcagc ggcgtgctt cgtccctcc aatgtctct cgcatctcta ttgttccac caggaatgaa tgaatgtggc ctatgcagc acttggcca atgttgata ttgttctact gccattcgc tggcatggc cgtggcagla atgtatct cttgtcta ttctgata atacgaagc ttgtgcaat gcttccaag tcaagcggg ccaagcctt tggaaactgt ggtacaca ttgggtgtg actgcttc taltggccac ttatggctt ctatgtgta cacgccttg gaaacgctt tcatccatt ggtgtgtg tcatgggtga catctactg cgtgcttc cgtatcaa tccatcatc talgggcca aaacataaa gatcagaaca cgggtgtcg ctatgcaa gatcagctg gacaagact tgcaggctgt gggaggaag tga MSSCNFTHAT FVLGIPGLE KAHFWVGFPL LSMYVAMFG NCIVVFIVRT ERSLHAPMYE FLCLAAIDL ALSTMPKI LALFWFDSRE ISFEACLTM FFIHALSAIE STILLAMAFD RYVAICHLR HAAVLNNTVT AQGIVAVVR GSLFFFLPL LIKRLAFCHS NVLSHVCVH QDVMKLAYAD TLPNVVYGLT AILLVMGV DV MFISLFSYFLI IRTVLQPSK SERAKFGTC VSHGVVLA FVYPLGLSVV HRFGNSLHPI VRVVMGDIYL LLPVINPII YGAKTKQRT RVLAMFKISC DKDLQAVGGK	P	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	194431	acttttca tttcttctt ggtgtgaga tgaagaaat gaaagcagag tatgcacct ttataggag attcaactg catctactg gatagcttc aaaaagctta aaatacaag acatccatct gacagatcac tgaaggagc actgtttt cgttttga atagtctcg attaaactt ttatctcaag aagaataa gaa gctagtatt tctaccacag ggtgtggaat ggtgtggc ttaccatgg cttctgccc tgccttgaac cttaggggc tgggtgtgtg cgtgtgtgga ctactgact gcatcatctt ggcactgggc acttggagga ttgtatcag gatccaaaga ggaataatca ctctctalc aagcaccctt acagagctt gcagggaatgg tggaaactgg gaaatggca gatatttg tacaagag tgaagaggac tgaatgac aatgtctat ttgttgaa atagtacta tatgggttt acttttgcca gaatccagt gggcagatat ggaatctt tgaacatg tgaagagat actccaatg cgggcaatcc aatggcagtc cgggtgtgca gttctctct atatggagag atagaattac aaaaagtgac aataggaaat tgaatgaa atctggaaac ccttgaagag caggatagag atgcacagc accactaat aacattctt ctgaagcca gatttaaca tctgaigcca ataatthac tcttgaagac atactatg ctacgagat ggttggacag atattcaaca ctccaagaa tgcctcact gaggcaaga aatgtgcat atgaacagtg agtcaactcc tgaatgccc tgaatgct ttcaagag ttgcgtctac tgcataatgat gatgccctta caagcttat tgaagcaatg gaaacttatt cctgtctt gggtaataca tcaatgtgtg aacctaac agcaatcag tgaacaat tctctcaga aatgtgggtg gggcttcaa atgtcgtt cttgtgtcag aagaggagcta gcatctct agttctagt tcaactta tacaataa tggatggc cttaacccag atgcacagc tgaacttga gttctgcta atatgacgaa aatatcac aagacatggc gtttgaat ttatcaaat gacaagctt tcaatacaa aactttaca gctaatcgg atttagta aaataatc tcaagcaaaa ctgaigaaa tgaagcaagt cagaagctt cgttgcact gttcttagt ccaagatata accaaaaga attcaactc latctatg cctgtgtg tttggaattg tcaaggaagg actgggacac atatggcgt caaaaagaca agggcactga tggattcctg cgtgtccgt gcaacaaac taaatatt gctgtatga tgaattca aaggattat caaatccca	A	Homo sapiens
663	194743	FLJ14454	NM_032787	194743		A	Homo sapiens

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aatcaatga catattacc aacgttggat ggcactgtc tctactgtt cggctctca cagttatatt tcaatgttc accaggaaag
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 SLQTCCKDTP NAGNPMAYRL CSLSLYGEIE LQKVTIGNCN ENLETKQV
 EDVTAFLNNI SSEVQLTSD ANKLTAENIT SATRVVGQIF NTSRNAPEA
 KKVAIVTSQ LLDASEDAFQ RVAATANDDA LTLIEQMET YSLSLGNQSV
 VEPNIAQSA NFSSENA VGP SNRVFSVQKG ASSSLVSSST FIHTNV DGLN
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 KTDENEQDS ASVDMVESPK YNQEFLYS YACVYWNLSA KDWDYGCQK
 DKGTGDFLRC RCNHTTNFAV LMTFKDYQY PKSLDLSNV GCALSVTGLA
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 LYLLIRTMK PLPRHFILFI SLGWGVPPI VVAITGVIV SQNGNPNQWE
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 ERFRLLETSP STEBITLSES DNAKESI
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664 194743 FLJ14454 NP_116176.1

665 194745 G Protein-
Coupled Receptor
SLT/MCH2 NM_032503

666	194745	G Protein- Coupled Receptor SLT/MCH2	NP_115892.1	<p>aaacattgg actgacacgt tggagaacaa gglacaagac catccggatc aattggggc ttggggcagc tctttatc cggcattgc ctgtctgggt ctactcgaag gcatcaaat ttaagaagg tggagaggt tggctttg attgacatc coctgaogat gtacttgg atactctta ttgacgata acaacttt ttctccct acccttgat ttgggtgct atatttaatt ttatgtctat acttgggga tglalcaaa gaalaaagat gccagatgct gcaatccag tgaacaaa cagaragga tgaagtggac aaagatggg ctgggtggg tggtagtct taictgagt gctgcccct atcagtgtt acaactggg aactacaga tggaaacgc cacaciggc ttctatgg gttattggt ctaactgt ctaactgt ccaagcagc cattaacct ttctctaca tctgtctgag tggaaatlc cagaacgic tgcctcaat ccaagaaga gcgactgaga aggaatcaa caatatggga aacactcga aatcacatt ttggaaagt acatggatca ccatgagct agaatgatt gttatctta cgggtattat tagaaaggc aggtgaccg atagtatt gccattct ctgtgtact tggactct agcagcatgg aagaagagtg taacatgca aatacaatga gcttaatatg ctactgaa aaaaaaaa aaaaaaaa</p> <p>MNPFHASOWN TSAELLNKSU NKEFAVOTAS VVDTVLPSPM IGIICSTGLV GNILIVFTII P RSRKKTVDDI YICNLAVADL VHIVGMPFLI HQWARGGEVW FGGPLCTIIT SIEDTCNQFAC SAIMTVMSVD RYFALVQPR LTRWRTRYKT IRNLGLWAA SFILALPVVW YSKVIKFDG VESCAFDLTS PDDVLWYLY LTITTFPL PLIVCYLI LCYTWEMYQQ NKDARCCNPS VPQXVMKLT KMVLVWVF ILSAAPYHVI QLVNLQMEQP TLAFFVGYLY SICLSYASSS INFPLYLLS GNQKRLPQI QRRATEKEIN NMGNTLKSIF</p>	Homo sapiens
667	194756	Chemokine Receptor FKSG80/GPR81	NM_032554	<p>ccacacac aggaaccgca tctggggga tgaagtcaga cagcagcagc cgggtgagt gtaaacgctc agataagcat ctgtgcat gtegggactc ctgggctgc tctgacccg gacactgct ctgtccccc catgtacac gggctgtgct ggcgcata gggggacac atctccagg tgaicggc gctgcatt gggctgtt gggctgtt gggctgtt gggctgtt ggggctggc tgggtgtt cgtctcac algagacct ggaagccag cactgttac ctctcaat tggcgtggc tgaattcic cttatgact gctgcttt tggacagac tatctctca gacgtagaca cgggcttt ggggacatc cctgcgagt ggggctcic acgtggga tgaacaggc cgggagcat gtttctta cgggtgtg tgggacagc tatcaag tggtaaccc ccaccagg gtaacacta tctacccc gggggcgct ggcctgct gcaacctg ggcctgct atctgggaa cagtatct ttgtggag aacatctt gcgtgcaaga gacggcgc tctgtgaga gcttcatc ggggtggc aatggctggc atgacatcat gttacgct gattctta tgcctcctg catcatctia ttgtctct tcaagattt tggagctg aggcggaggc agcagctggc cagacaggt cggatgaaga aggcgaccc gttcatcag gttgtggca ttgtgtcat cacatgac ctgcccagg tctgtctag acttattc ctgtgagg tgcctggag tgcctggag tgcctggag tgcctggag atggggctt gcaatacc ctacgttca ctaatgaa cagcatgct gttccctgg tgaatttt tcaagccc tctttcca aatctcaa caagctcaa atctgcagc tgaacccaa gcagccagg cactcaaaa cacaaggcc ggaagagag ccaatttga acctggct cagggatgc atcaggtgg caaatgtt cnaagccag tctgtggg aatggagatc ccaatgtt ggtgtgact gaaagcag accaaca ctaggaaga tagagggg acttagatt aactgtgt aagggtgg ggggttga aatgcaccc cctcttca ttgagagc gctctgca catgaactgc atctctca ttctgtgga aatgaatc acacaact accttgg gagggtccag tt</p> <p>MYNGSCCRIE GDTISQVMPP LLIVAFVGA LGNGVALCGF CFHMKTWKPS P TVYLFNLVA DELLMICLPF RTDYLLRRRH WAFGDPCRV GLFTLAMNRA GSIVFLTVVA ADRYFKVHP HHAVENTISR VAAGIVCTLW ALVILGTVYL LLENHLCVQE TAVSCSFIM ESANGWHDIM FOLEFFMPLG ILFCFSKIV WSLRRRQQLA RQARMKATR FIMVVAIVFI TCYLPVSARS LYFLWTVPS ACDPSVHGAL HTLSFTYMN SMLDPLVYF SSPSPKFPYN KLIKCSLKPX</p>	Homo sapiens
668	194756	Chemokine Receptor FKSG80/GPR81	NP_115943.1		Homo sapiens

671	194858	G Protein-Coupled Receptor LS194858	LG94710	QGLFELFHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSAH RVDLSAV ttagttcaag tccagtgga cacttgcttg gcttgctggg tggtaggcaa tgcctggggc gggactgtcc cggagggtc ttcccacag cccctgcagg ccacttggg cggctgccc cagggggct gtagagctt gtagccag cccalggct acgggcacag ccgctgact cggcttctt agggagagga gggacacag tgcocaggc cccatgggg ggcctgtc ataggccag acagagaga gcatgtgtgc cacttaggg cccacagca gccggaagag cagcatgtct ccagccgtg ccctgtctg cctccagga agggccggg cagggccga gggctcagc cggcacatg cccgtccag ccggcagatg tctgcagct ggcgtggg agtggcag acggggacag agaggaaggc agcagccac accggcgggc gaggagccc atagacttg agtiacaggt agggggctg gtagagagc tgggagctgc agtggcac aggggtccag tggttcac ccagagcggg cagactggca aagagcaggg gaccagcca ggtgaggaagc agggccagc gaatgctcc agggggctg agtgccca ggcactggat tagcgtcc ccgtgacca gcaagaggt ggcagagcag gtagaggaagc agaatgtgg agccaagt agagggagc aggcagga acccgga cctgggca cctgggca ggcagaggt ggcctggc cccagggc ccgtgagcag cccagcagc agtaggctca ggaagagga ggcagaggt ggcctggc cccagggc cccagggc ccctggcga ggcagaggt cgcgtgag atgagcttg cagggccag ggaagagccc aagagccc tgggaatggg ggcgggccc tccagctg tggggctt cactgtgc ctggggacag ggaagcttg ggcgggagc cggcagc QDTRHGPNRC RAGCNSLT RKAQAGQAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGIA GTACAATCW LLPPEPTAGW AAHSGIATL PGLWNQSRG YWSCILVYLA PNFSLSLA NLLVHGERY MAVRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWTP GANCSQAIF PAPYLEVY GLLPVAVGAA AFLSVRLAT AHRQLQDICR LERAVCRDEP SALARALTWR QARAQAGAML LFGLCWGPVY ATLLSVLAY EQRPPLGPT LLSLSLGSAAAAPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tccggccag gatagtga tctggg cccagcag gctagtag tgggggtt tgcacaa tgttatcc atgttagc agaatgtg tggcagtag gtaggtgag gctcagat cagcagagc tgaattca actggattg aggacccca ccttgata ggtgactat tctgtgtg tctgtat ccccttta aatagggaag taatccac atggcagg gggggga atcagatc atcagctgg tgaacaa tgggttct tccagggc accagctg ggtttctg catggatca accatccag tctgggag agaatgca ccaatcac gactgtgga gactctgc tacaagcga ccctggctt caggggct acgtgagc ttccctgt cgcctgaca ggaagcgg tggctgtg gctcggg tgcggcagc gaggagc tgcctcalt laltccca accgtgagc ggcgactc cctccia ggcggccat taltgtc ccgttagcc taltatalt ccggcatcc altccaaa tctcagcc tggatgac ttccctat ttagggc aagcagctg agggccatca gacagagc ctgctgtcc altctgtg ccalctgta ccaatgccc cggccagat accgtgac ggctatgt gctgtctt gggccctg cctgtgag agatccag agtggatg ctgtgact ctgttagtg gctgtatc tgttggtt gaaagcag attcatat aatgcgtg ctgtttt tagtgtgt tctgtggg tccagccgtg tctgtgtt caggatct tgggaltcc ggaagatg ccgtgacagg ctgactga ccatctct cagagctg gctctctc tctgtggc attcagtg ccgtttt caggatcc ctgttaga agcttatt tgtcatgt catcagtt ccatttct gctgctt aacagctg ccaacccat catctat tctgtggt ctttaggca ggcacaaat aggcagac tgaagctgt tctcagag gctgtcag acagcctga ggtgtaga ggtggaggg ggcctccta ggaacccctg gagctgtg gaaagatg ggaagatg ggaagatc ctgctgtc agacagagc ttagagca tgcctgtg ccacctga caataltg catctt agcctgtg ctgagaaatg	A	Homo sapiens
672	194858	G Protein-Coupled Receptor LS194858	ENSP00000053 533	QDTRHGPNRC RAGCNSLT RKAQAGQAP APNSHACRLP LQDSPVPRTK MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGIA GTACAATCW LLPPEPTAGW AAHSGIATL PGLWNQSRG YWSCILVYLA PNFSLSLA NLLVHGERY MAVRPLQPP GSIRLALLT WAGPLLFASL PALGWNHWTP GANCSQAIF PAPYLEVY GLLPVAVGAA AFLSVRLAT AHRQLQDICR LERAVCRDEP SALARALTWR QARAQAGAML LFGLCWGPVY ATLLSVLAY EQRPPLGPT LLSLSLGSAAAAPVAMG LGDQRYTAPW RQPPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT tccggccag gatagtga tctggg cccagcag gctagtag tgggggtt tgcacaa tgttatcc atgttagc agaatgtg tggcagtag gtaggtgag gctcagat cagcagagc tgaattca actggattg aggacccca ccttgata ggtgactat tctgtgtg tctgtat ccccttta aatagggaag taatccac atggcagg gggggga atcagatc atcagctgg tgaacaa tgggttct tccagggc accagctg ggtttctg catggatca accatccag tctgggag agaatgca ccaatcac gactgtgga gactctgc tacaagcga ccctggctt caggggct acgtgagc ttccctgt cgcctgaca ggaagcgg tggctgtg gctcggg tgcggcagc gaggagc tgcctcalt laltccca accgtgagc ggcgactc cctccia ggcggccat taltgtc ccgttagcc taltatalt ccggcatcc altccaaa tctcagcc tggatgac ttccctat ttagggc aagcagctg agggccatca gacagagc ctgctgtcc altctgtg ccalctgta ccaatgccc cggccagat accgtgac ggctatgt gctgtctt gggccctg cctgtgag agatccag agtggatg ctgtgact ctgttagtg gctgtatc tgttggtt gaaagcag attcatat aatgcgtg ctgtttt tagtgtgt tctgtggg tccagccgtg tctgtgtt caggatct tgggaltcc ggaagatg ccgtgacagg ctgactga ccatctct cagagctg gctctctc tctgtggc attcagtg ccgtttt caggatcc ctgttaga agcttatt tgtcatgt catcagtt ccatttct gctgctt aacagctg ccaacccat catctat tctgtggt ctttaggca ggcacaaat aggcagac tgaagctgt tctcagag gctgtcag acagcctga ggtgtaga ggtggaggg ggcctccta ggaacccctg gagctgtg gaaagatg ggaagatg ggaagatc ctgctgtc agacagagc ttagagca tgcctgtg ccacctga caataltg catctt agcctgtg ctgagaaatg	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	tccggccag gatagtga tctggg cccagcag gctagtag tgggggtt tgcacaa tgttatcc atgttagc agaatgtg tggcagtag gtaggtgag gctcagat cagcagagc tgaattca actggattg aggacccca ccttgata ggtgactat tctgtgtg tctgtat ccccttta aatagggaag taatccac atggcagg gggggga atcagatc atcagctgg tgaacaa tgggttct tccagggc accagctg ggtttctg catggatca accatccag tctgggag agaatgca ccaatcac gactgtgga gactctgc tacaagcga ccctggctt caggggct acgtgagc ttccctgt cgcctgaca ggaagcgg tggctgtg gctcggg tgcggcagc gaggagc tgcctcalt laltccca accgtgagc ggcgactc cctccia ggcggccat taltgtc ccgttagcc taltatalt ccggcatcc altccaaa tctcagcc tggatgac ttccctat ttagggc aagcagctg agggccatca gacagagc ctgctgtcc altctgtg ccalctgta ccaatgccc cggccagat accgtgac ggctatgt gctgtctt gggccctg cctgtgag agatccag agtggatg ctgtgact ctgttagtg gctgtatc tgttggtt gaaagcag attcatat aatgcgtg ctgtttt tagtgtgt tctgtggg tccagccgtg tctgtgtt caggatct tgggaltcc ggaagatg ccgtgacagg ctgactga ccatctct cagagctg gctctctc tctgtggc attcagtg ccgtttt caggatcc ctgttaga agcttatt tgtcatgt catcagtt ccatttct gctgctt aacagctg ccaacccat catctat tctgtggt ctttaggca ggcacaaat aggcagac tgaagctgt tctcagag gctgtcag acagcctga ggtgtaga ggtggaggg ggcctccta ggaacccctg gagctgtg gaaagatg ggaagatg ggaagatc ctgctgtc agacagagc ttagagca tgcctgtg ccacctga caataltg catctt agcctgtg ctgagaaatg	A	Homo sapiens

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	MDSTIPVLGT ELTPINGREE TPCYKQTL SF TGLTCIVSLV ALTGNAVVLW LLGCRMRNA VSIYILNLVA ADFLFLSGHI TCSPLRLINI RHPISKILSP VMTFPYFIGL SMLSIASTER CLSILWPIWY HCRPRYLSS VMCVLLWALS LLRSILEWMF CDFLFSGADS VWCETSDFT IAWLVFLCVV LCGSSLVLLV RLCSGRKMP LTRLYVTILL TVLVFLLCGL PFIQWALFS RIHLDWKVLF CHVHL VSIFL SALNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDTP EDEGGGWLPQ ETLELSGSRL EQ	P	Homo sapiens
675	194903	G Protein- Coupled Receptor GPCRB3	LG100657	tcaggtggag ccgaagccg ccgtgtgagtc ctgaatggag gctctggagt gctctgtgt gttgaagctt gggcgggcaga ggatcacgta gcaataggc agaaataacc caccggaagcc gctgtcacagg ctgtctagcc cagcatcat gttggcccca ggcaggactt tgcgtcgta gacgtctggcc gttgtgaaaga agtgcgatacca ggacacgaaag ttgaagagaca ggtctgaaggt gacacattt gctctgtgt agtctcttgg caagtcttta ccaggtttag tgcaggcaaa ggtcactgag gtagagggagcc cattttagag gaaggccagt algaagccca gggaagttgtt cttctgtcac taaagcatca ccagatgggg gaaagccgtgg taatccatg caggcagttgg ggtccacacc accaagccaaag ttaagacgat aagcagctgg ggcgtgtgagc tgaatcac aaacaggcca gcaccgtgtt ttggaccaca ggcgtgtgag aatgttagta ccttgttggg aaacttggag algtatgata gttggaaata gcgaactgtc aggcaggaca ggaagatgtt gaaaccaagg gcaaaaggagg cctgtgtgtag caagcacgca ggcctgttgg gttccaaa gaagccatag aggtctggccac taactgtctg cagggttagcc agcalaaaga agcacaggcc ggccctgtct gacttccca caaggcttgg aicgttagag gctgtgaaag gaaaggccaa aggttcttctg agagccatg gacgagta ggaatagaa ataggggctt gcaagatctt ggtgaagttt taccaggggca gctagatct acttggcata gttggatggg ggtatggccg agtggggctt gaggccagcc atttccaa aatgtctgtt taattacag acttgggaa cacacaggc ggtctgtat ggtcagat ccaatggagg ttggcaaac cctgtggagg acctaaact ggttagctctg cccatacc aggaagttta cgtatctgag ggaagcagctt gctcccaagg gaggggcattg taacctct ctcttggcag caattccatg aacctcttct gctgtgtgt ttcttctgt cctgtacctt tgaaggcaga agggaaagt tctgtctct acagagatgg tgaaggaaga gaatgtggcc cctgtgacac aactaaagttac ctgtgtctt agtacctaa tttgtctct gttcttacc ttgcatctt ggtatgggaa tctgttctt ttcttctgt cagacacgtct agtatctgta ttcaaggcaa gctgttcaag gacgtatgtt tcttggcat gggcaacaga aggggaacgta ggaacaaagg gcaacaaagg aacaaatgt ataatcatt aggaagaaag gttgaatca ggtatcact gctttttag gttgtgtgta gacagctctc taacagagga cacacctcag tcaaggctt tcaatgtct aattcttct ttcttctt ttittgaga cagagtttt cttgtctg ccaggcttga gttgcaatgtt gcaatcttgg ctacttga cctccgctc ccgggttcaa gcaattctc tgcctcagcc tcccgagttag ctgggaatc agggcacagc cacaagccg ggttaactt ttittgatt ttatgttaga tgggggttca ccaatgtgtt caggctgtgtc tgaactct gacctcaggt gatccacca cctcggctc ccaaggtgtt gggatcag gttgttga cagctcag cctcgtcctt tttttgggg ggaagaaatc tgcgttgg gttcagggctt gaatgtcatct tgggtcactt caacctcgc cctcgtgggtt caatgtatc tcttgcctca gcttccgag tatgtgggt tacaagcag cgtccacca ccaagcctaa ttittat ttgtgttag agtgggtt acctgttgg cagggtgtt ctgaactc agacctaa gttatccacc gctcagctt ccaaggtc tgggtatca ggcataggcc accgacca gttgtgtt ctttgaatca gaaattctg tggtagcagg tctctccaa cctgaagcta actggcagcc cagtgtactt gcttgggtt tggggcagg cacttgggc ccaagggagg cctctctc accgtgtcagc cccgggggtt gcttgggtt tgcctgtct catlgtccac taccactt ttttgggga ggttccagcc ccacaggcca cacactcaaa gcagcagta tggaaaccg taaccactc ctgtgtccct tcaagacctt cgttggatca cacagactta ggcaccttga agaaagcaga gggggccacac gtagggggcc aaggtcaagg acaggtctaca tttgtgacag aaaaacagat ctctgtgcat ctgacctcagg ggtcactc caggggcagg cctctgtctg tttgtgaactt cggccaggg catctgcaca	A	Homo sapiens

එදිරිපත්වනු ලබන අතර, එමෙන්ම ප්‍රධාන අමාත්‍යවරයාගේ ප්‍රතිචාරයට අනුකූලව ප්‍රතිචාර දක්වනු ලබන බව පැහැදිලිව පෙනේ. එමෙන්ම ප්‍රධාන අමාත්‍යවරයාගේ ප්‍රතිචාරයට අනුකූලව ප්‍රතිචාර දක්වනු ලබන බව පැහැදිලිව පෙනේ. එමෙන්ම ප්‍රධාන අමාත්‍යවරයාගේ ප්‍රතිචාරයට අනුකූලව ප්‍රතිචාර දක්වනු ලබන බව පැහැදිලිව පෙනේ.

Homo sapiens.

P

**G Protein-
Coupled Receptor
GPCRB3** LR92

676 · 194903

677	194904	WO0034334- hFB41A	AX147788	VLGSSTWSPV QLNINETKIQ WHGKNHQVPK SVCSSDCLEG HQRVVTFGHH CCFECVPCGA GTFLNKSLEY RQPCGTEWV APEGSTQCFP RTVVFLALRE HTSWVLLAAN TLLILLIGT AGLFAWHLDT PVARSAGGRL CFLMLGSLAA GGSLYGFFG EPTRPACLRL QALFALGFTI FLCLTVRSF QLIHFKFST KVPTFYHAWV QNHGAGLFVM ISSAAQQLLIC LTWL VVWVTP L PAREYQRPFL VMLECTETN SLGFLALFLY NGLLSISAF CSYL GKDLPE NYNEAKCVTF SLLENFVSWI AFFITASVYD GKYLPAANMM AGLSSLSGGF GGYFPLKCYV ILCRPDLNST EHFQASIQDY TRRCGST gagcaacatg aicitttga agtacttgc ggtgtgttc ttgacgggca cgaagacacag agtgtttac atgtcttgc tcatggogat gcactcgacg aigtatgaagg cagttaggia gttctcttc ttacaaca cgggtgggaa gnaatcgcg acgtatggia agccgtatga gggcgccag catatgacgt agcggtggag gttgacatg agcaccatga ccgtctct cggcgagcgc agcccttgc ggtatgtct tgtcttgaat cagggaacg ctttgaaca gttctcccg gattctctg catatgacag ggtcatgg accagggcg ccagaatc tatccaaag ataaagaga agtaggacti gttatgaagc tgcgttca caggccagat ctggccagc aagatcttt cttgtctcti gacatgac aggacccgti cgggtgggaa gttgagcaga gggtatgca tcatgattga caccgtcac accaaggcaa tcatggccta ggtgtttgg cacttalc gttgtctacg cgttatgca atagccatg actatggga agaacacaag tggaggcagc MGFMDDNATN TSTFSLVNL PHGAHATSP FNFYSDDYM PLDEDEDVTN SRTFFAAKIV IGMALVGIML VCGIGNIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLVSTNA LLAIDRYL AIVHPLRPM KCQTATGLIA LVWTVSILIA IPSAYFTTET VLVVVKSEK FCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFA V PGFQTEQIRK RLRCRRKTVL VLMCILTAYV LCWAPFYGT IVRDFPTVF VKEKHYLTAF YIVECIAMSN SMNTLCFVT VKNDIVKYFK KIMLLHWKAS YNGKKSADL DLKTIGMPAT EEVDCLRL ggcagaggc gcggcgccg actgttgacti gcaagtctt caccggcaca gggacttgggg agtatacttgc tgcctgcaag gacttgcagc tggggctgtc actgttctg ctgtctggcc tgggtttggg cgttgcagtg ggcctgttgc acaaagccct gtctgttctg gccaacatc acagcaaggc cagcatgacc atgcgggagc tttacttgt caaatatggca gttggcagcc tgggtctcag cggccctggcc ctgttgcacc tgcctggccc cggtagcttc cgttggcgcg ttttggagtgt gggcggggaa gttcacgttgg cactgcagat ccccttcaat gttctctcac tgggttgcct gttcttccc gcccctgttga tccctggaca ctacatcgag cgttgcactg cggcggaacta catggccagc gttgaaca cgcggcgacgti gttcgcttct gttgttgggtg ggcgcttct gacatgttct tccctgtc tcttctat ctgtcagccat gtttccacc gggcgctaga gttgcgcaag atgtcaaacg catgaacttgc cgaagccagc ctgttcttca tgggttacti gttgttcagca ctgggcaacc ttaagctt ggttctactc tcccgcttcc gcaaggagga cagcgccttgc gaccggggca cggggccagcti gttgcccctc gttacatggc tgccttgggc caaccgttgc acgtcagttt ggtcttggac gccacatct ctatcttgc tggggcaca gtttcatc tggcgaggga agcccgga gtcacatc ctggggctac tgcattt gtaggattt tccaaactc tggcttctc cagcagctt gttacacac ttcttacc ctatggac catgaacttcc cagcaagct ccaacgttgc atgaanaagc tgccttgcgg gttacgggca tgcctccgg accaatgggg gttgtcagcag gttcttggcti aggtcggccca ggccttgg gggtacttga ctctgttga cgtcagagcac ttattacc tggagcttc ttccacaa atggccactt tggggcaagg ctgttggctc gggaagaga caggaagggt gttttctt agtttctt ttccacaa atggccactt tggggcaagg ctgttggctc cgttggcttgc atcttggcti agttcccg aggtcttgc gttccaaa cagcagctc aaggttccaa tctgcaaaag	Homo sapiens
678	194904	WO0034334- hFB41A	LR114	SRRTFAAKIV IGMALVGIML VCGIGNIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLVSTNA LLAIDRYL AIVHPLRPM KCQTATGLIA LVWTVSILIA IPSAYFTTET VLVVVKSEK FCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFA V PGFQTEQIRK RLRCRRKTVL VLMCILTAYV LCWAPFYGT IVRDFPTVF VKEKHYLTAF YIVECIAMSN SMNTLCFVT VKNDIVKYFK KIMLLHWKAS YNGKKSADL DLKTIGMPAT EEVDCLRL ggcagaggc gcggcgccg actgttgacti gcaagtctt caccggcaca gggacttgggg agtatacttgc tgcctgcaag gacttgcagc tggggctgtc actgttctg ctgtctggcc tgggtttggg cgttgcagtg ggcctgttgc acaaagccct gtctgttctg gccaacatc acagcaaggc cagcatgacc atgcgggagc tttacttgt caaatatggca gttggcagcc tgggtctcag cggccctggcc ctgttgcacc tgcctggccc cggtagcttc cgttggcgcg ttttggagtgt gggcggggaa gttcacgttgg cactgcagat ccccttcaat gttctctcac tgggttgcct gttcttccc gcccctgttga tccctggaca ctacatcgag cgttgcactg cggcggaacta catggccagc gttgaaca cgcggcgacgti gttcgcttct gttgttgggtg ggcgcttct gacatgttct tccctgtc tcttctat ctgtcagccat gtttccacc gggcgctaga gttgcgcaag atgtcaaacg catgaacttgc cgaagccagc ctgttcttca tgggttacti gttgttcagca ctgggcaacc ttaagctt ggttctactc tcccgcttcc gcaaggagga cagcgccttgc gaccggggca cggggccagcti gttgcccctc gttacatggc tgccttgggc caaccgttgc acgtcagttt ggtcttggac gccacatct ctatcttgc tggggcaca gtttcatc tggcgaggga agcccgga gtcacatc ctggggctac tgcattt gtaggattt tccaaactc tggcttctc cagcagctt gttacacac ttcttacc ctatggac catgaacttcc cagcaagct ccaacgttgc atgaanaagc tgccttgcgg gttacgggca tgcctccgg accaatgggg gttgtcagcag gttcttggcti aggtcggccca ggccttgg gggtacttga ctctgttga cgtcagagcac ttattacc tggagcttc ttccacaa atggccactt tggggcaagg ctgttggctc gggaagaga caggaagggt gttttctt agtttctt ttccacaa atggccactt tggggcaagg ctgttggctc cgttggcttgc atcttggcti agttcccg aggtcttgc gttccaaa cagcagctc aaggttccaa tctgcaaaag	Homo sapiens
679	194905	G Protein- Coupled Receptor MGC7035	BC014241	SRRTFAAKIV IGMALVGIML VCGIGNIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLVSTNA LLAIDRYL AIVHPLRPM KCQTATGLIA LVWTVSILIA IPSAYFTTET VLVVVKSEK FCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFA V PGFQTEQIRK RLRCRRKTVL VLMCILTAYV LCWAPFYGT IVRDFPTVF VKEKHYLTAF YIVECIAMSN SMNTLCFVT VKNDIVKYFK KIMLLHWKAS YNGKKSADL DLKTIGMPAT EEVDCLRL ggcagaggc gcggcgccg actgttgacti gcaagtctt caccggcaca gggacttgggg agtatacttgc tgcctgcaag gacttgcagc tggggctgtc actgttctg ctgtctggcc tgggtttggg cgttgcagtg ggcctgttgc acaaagccct gtctgttctg gccaacatc acagcaaggc cagcatgacc atgcgggagc tttacttgt caaatatggca gttggcagcc tgggtctcag cggccctggcc ctgttgcacc tgcctggccc cggtagcttc cgttggcgcg ttttggagtgt gggcggggaa gttcacgttgg cactgcagat ccccttcaat gttctctcac tgggttgcct gttcttccc gcccctgttga tccctggaca ctacatcgag cgttgcactg cggcggaacta catggccagc gttgaaca cgcggcgacgti gttcgcttct gttgttgggtg ggcgcttct gacatgttct tccctgtc tcttctat ctgtcagccat gtttccacc gggcgctaga gttgcgcaag atgtcaaacg catgaacttgc cgaagccagc ctgttcttca tgggttacti gttgttcagca ctgggcaacc ttaagctt ggttctactc tcccgcttcc gcaaggagga cagcgccttgc gaccggggca cggggccagcti gttgcccctc gttacatggc tgccttgggc caaccgttgc acgtcagttt ggtcttggac gccacatct ctatcttgc tggggcaca gtttcatc tggcgaggga agcccgga gtcacatc ctggggctac tgcattt gtaggattt tccaaactc tggcttctc cagcagctt gttacacac ttcttacc ctatggac catgaacttcc cagcaagct ccaacgttgc atgaanaagc tgccttgcgg gttacgggca tgcctccgg accaatgggg gttgtcagcag gttcttggcti aggtcggccca ggccttgg gggtacttga ctctgttga cgtcagagcac ttattacc tggagcttc ttccacaa atggccactt tggggcaagg ctgttggctc gggaagaga caggaagggt gttttctt agtttctt ttccacaa atggccactt tggggcaagg ctgttggctc cgttggcttgc atcttggcti agttcccg aggtcttgc gttccaaa cagcagctc aaggttccaa tctgcaaaag	Homo sapiens

680	194905	G Protein- Coupled Receptor MGC7035	LR112	<p>cctctcgcc tcagccccc tcagcattca gttgtcaat gaagtatga aagcttagag ccagtafta tactttgigg ttaaaalact tgaatcccc tigtittt taaaaaaca gaigtctct agaaaaaga caaatagtaa aatgaacaaa accctacgaa agaatggcaa cagcagggt ggccggggcc tgcagtgag cggcgtgag tagcaagggc tgcagggtg gcacagctga ccacagggtt ctgagacat ttacagaag tgcctagac ggagagacat ggctgggtt aaatggagct attcaatgc agtgcgcgc tctctcagc caccaatgt cctgacacc ctcaccagc cccacagata acatcagctg aggttttt cagtatgaac ctgtcctaaa tcaattctc aaagtgtga caaactaaa gaataataa aaacataaga aaggtgaataa aaaaaaaa aaaa MWSCSWFNGT XLVEELXACQ DLQLGLSLLS LGLVVGVPV GLCYNALLVL ANLHKSAMT MPDVYFVNMA VAGL VLSALA PVHLLGPSS RWALWSVGGE VHVALQIPFN VSSLVAMYST ALLSLDHYE RALPRTYMAS VYNTRHVCVF VWGGALLTSF SLLFYICSH VSTRALECAK MQNAEAADAT LVFIGYVVPV LATLYALVLL SRVRREDTPL DRDTGRLEPS AHRLLVATVC TQFGLWTPHY LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLRYMNN QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGCGCCG GGAATGTCCC CTGAATGCGC GCGGCAGCG GCGACGCGC CCTTGGCGAG CCTTGGCGAG CCTGGAGCAA GCCAACGCA CCGCTTTC CTTCTTCTCC GACGTCAAGG GCGACACCG GCTGTGCTG GCGCGGTGG AGACAAACCGT GCTGGTGCTC ATCTTTGCAG TGTGCTGCT GGGCAACGTG TCGCCCTGG TGCTGGTGG CCGCCGACGA CGCGCGCG CGACTGCTG CCGTGTACTC AACCTCTTCT GCGCGGACCT GCTCTTATC AGCGTATCC CTCTGGTGT GCGCGTGCG TGGACTGAGG CCTCCCTGCT GGGCCCGGT GCCTGCCACC TGCTTTCTA CGTGATGACC CTGAGCGCA GCGTCAACCT CCTACGCTG CCGCGGTCA GCCTGGAGGG CATGTGRC ATCGRCACC TGGAGCGCG CGTGGGGT CCTCGCGGC GGCGCGGC AGTGTGCTG GCSCTCATCT GGGCTATTC GCGGTGCGC GCTGTGCTC TGTGCTCTT CTTTGGAGTC GTCCCGCAAC GGCTCCCGG CGCGACCG GAAATTCGA TTTCACACT GATTGGCCC AGCATTCCTC GAGATCTC GTGGGATGC TCTTTGTA CTTTGAAT CTTGGTCCA GGACTGTCA TTGTGATCAG TACTCCAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGTCACCG TAAGCTGGC CTACTCGGAG ACCACAGA TCCGGTGTG CCAGCAGGAC TTCCGGCTCT TCCGACCCCT CTTCTCCTC ATGCTCTCT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCCTCT CATCCTGATC CAGAACTCA AGCAAGACCT GTCATCTGG CCGTCCCTCT TCTTCTGGGT GGTCCCTTC ACATTTGCTA ATTCAGCCCT AAACCCCATC CTCTACAA TAACACTGTG CAGGAATGAG TGGAAAGAAA TTTTGTCTG CTTCTGGTTC CCAGAAAGG GAGCCATTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAT TCTGGTAA TTTCTTTATA GCCGAGTTTC TCACACTGG CGAGCTGTGG CATGCTTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGACCCCTG CTTTAAGAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGGTAAT AAGGGGTGAT CACCAAGTTT CATAATATT TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCCCTGAA</p>	P	Homo sapiens
681	194907	G Protein- Coupled Receptor 14273	LD22826	<p>QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGCGCCG GGAATGTCCC CTGAATGCGC GCGGCAGCG GCGACGCGC CCTTGGCGAG CCTTGGCGAG CCTGGAGCAA GCCAACGCA CCGCTTTC CTTCTTCTCC GACGTCAAGG GCGACACCG GCTGTGCTG GCGCGGTGG AGACAAACCGT GCTGGTGCTC ATCTTTGCAG TGTGCTGCT GGGCAACGTG TCGCCCTGG TGCTGGTGG CCGCCGACGA CGCGCGCG CGACTGCTG CCGTGTACTC AACCTCTTCT GCGCGGACCT GCTCTTATC AGCGTATCC CTCTGGTGT GCGCGTGCG TGGACTGAGG CCTCCCTGCT GGGCCCGGT GCCTGCCACC TGCTTTCTA CGTGATGACC CTGAGCGCA GCGTCAACCT CCTACGCTG CCGCGGTCA GCCTGGAGGG CATGTGRC ATCGRCACC TGGAGCGCG CGTGGGGT CCTCGCGGC GGCGCGGC AGTGTGCTG GCSCTCATCT GGGCTATTC GCGGTGCGC GCTGTGCTC TGTGCTCTT CTTTGGAGTC GTCCCGCAAC GGCTCCCGG CGCGACCG GAAATTCGA TTTCACACT GATTGGCCC AGCATTCCTC GAGATCTC GTGGGATGC TCTTTGTA CTTTGAAT CTTGGTCCA GGACTGTCA TTGTGATCAG TACTCCAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGTCACCG TAAGCTGGC CTACTCGGAG ACCACAGA TCCGGTGTG CCAGCAGGAC TTCCGGCTCT TCCGACCCCT CTTCTCCTC ATGCTCTCT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCCTCT CATCCTGATC CAGAACTCA AGCAAGACCT GTCATCTGG CCGTCCCTCT TCTTCTGGGT GGTCCCTTC ACATTTGCTA ATTCAGCCCT AAACCCCATC CTCTACAA TAACACTGTG CAGGAATGAG TGGAAAGAAA TTTTGTCTG CTTCTGGTTC CCAGAAAGG GAGCCATTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAT TCTGGTAA TTTCTTTATA GCCGAGTTTC TCACACTGG CGAGCTGTGG CATGCTTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGACCCCTG CTTTAAGAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGGTAAT AAGGGGTGAT CACCAAGTTT CATAATATT TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCCCTGAA</p>	A	Homo sapiens

682	194907	G Protein-Coupled Receptor 14273	LR116	<p>TCCAGCAGT TTGGGTGAG GTGGGTGGAT CACTGAGGT CAGGAGTTGG AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA AAAAAATTA GCTGGGAGTG GTGGTGGCA CCTGTAATCC TAGCTACTTG GGAGGCTCAA CCACGAGAAAT CTCTTGAACC TGGGAGGCAG AGGTTCAGT GAGCCGAGAT CCGCCATTG CACTCCAACC AGGCAACAA GAGTGAAACT CCATCTTAAA AAAAAAAA AAAGATTGT TATGGGTTC TTAAATGT GAACTTTTT AGTGTGTTG TATATGATCA AATTAAATAA ATATTATTT ATGACTGTT AGCAAAAAA AAAAAAAA AGGCGG MSPECARAAG DAPLRLEQA NRTFPFSD VKGDHRLVLA AVETTVLVLI FAVSLGNVC ALVLVARRR RGATACLVN LFCADLLFIS APLVLA VRW TEAWLLGPVA CHLLFYVMTL SGSVTLTLA AVSLDRMVCV VMLQRGVRC GRRARVLLA LIWGYSAVAA LPLCVFFRVV PQLPGADQE ISICTLIWPT IPGEISWDVS FVTLNFLVPG LVVISYSKI LQTKASRKR LTVSLAYSRS HQIRVSQQDF RLFRTLFLM VSFMMWSP I DITILLILQ NFKQDLVIWP SLPPWVAVPT FANSALNPIL YNMTCRNEW KKFCCCTWFP EKGAILTDS VKRNDLSIS G ITYSAISDEL RDKVFPALL RTTPSADHHV EAMVQLMLHF RWNWIVLVLS SDTYGRDNGQ LLGERVARRD ICIAFQETLP TLQPNQNMST EERQRLVTIV DKLQSQSTARV VVVFSPDLTL YHFFNEVL RQ NFTGAVVIAS ESWADPVLH NLTELHGLGT FLGTTIQSV IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVSYSVA VYVAHALHS LLGCDKSTCT KRVVYPWQLL EEIWKVNFIL LDHQIFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYVPL ORQLKNIKTS LHTVNNITPM SMCSCRQCSG QKKKPVGHV CCFECIDCLP GTFLNHTPCP NNEWSYQSET SCFKRQLVEL EWEAFTIIV ALLAALGELS TLAILVFWR HFQTPIVRSA GGPMLFLMLT LLLVAYMVVP VYVGPVKVST CLCRQALFPL CFTICISCA VRSFQIVCAF KMASRFPRAV SYWVRYQGPY VSMAFITVLK MVIVVIGMLA RPQSHPRIDP DDPKITIVSC NPNYRNSLLF NTSLDLLSV VGFSFAYMGK ELPTNYNEAK FITLSMTIFY TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFNSM IQGYTMRDD</p>	P	Homo sapiens
683	194908	G Protein-coupled Receptor Gprb4	LR117	<p>atagagcaga attacccct gctggggct gfgcagcgt gctacgcga cggaaatgg tccgtgtga aaalcccct ctgcggga tcccgga tctgtat agtgttggc ttggggcgt gttggaaac ctcgtgtga tgaattcaat ctccattc aagcagcgc actccagac caatttc gttgcttc tggcgtgcg tgaattcgt gttgtgtga cttgtgoc ctcagcag gtcaggacgg tggagagcgt ctagaattt gggagaggti ttgacti ccacaccgc tggatgtg catgtgla ctctcttc ttcaattt gcttcttc catcagcagg tacatggcg ttacgacc cctgtctat ctacacagt taccgtat tggcagga attgcatca gcggtctcg gatcctgccc ctagtaca ggcggcgt gttacaca ggtgtctat acgatggct ggaggaata tctgagccc taactgtat agggaggti cagaccgtg taatacaaa cttgggtgtg acagatttc tctctt talacclac ttatgtga taattctg tggaaacata ttctgtgg ctgagcagca ggggaaag atagaaata ctgttagcaa gacagatca tctcagaga gttacaagc cagagtgccc agggagaga gaagaagcagc taacacctg ggggtcacag tggtagcatt taigattca tggtaacct atagcatga ttaataat galgcttia tgggtttat aacctgtcc tgtattatg agattgtcg ttgtgtgt tatataact cagccaigaa tcttgtat taagtatt ttaccatg gttaggaa gcaataaag</p>	P	Homo sapiens
684	194957	Trace Amine Receptor 4 (TA4)	AF380192	<p>atagagcaga attacccct gctggggct gfgcagcgt gctacgcga cggaaatgg tccgtgtga aaalcccct ctgcggga tcccgga tctgtat agtgttggc ttggggcgt gttggaaac ctcgtgtga tgaattcaat ctccattc aagcagcgc actccagac caatttc gttgcttc tggcgtgcg tgaattcgt gttgtgtga cttgtgoc ctcagcag gtcaggacgg tggagagcgt ctagaattt gggagaggti ttgacti ccacaccgc tggatgtg catgtgla ctctcttc ttcaattt gcttcttc catcagcagg tacatggcg ttacgacc cctgtctat ctacacagt taccgtat tggcagga attgcatca gcggtctcg gatcctgccc ctagtaca ggcggcgt gttacaca ggtgtctat acgatggct ggaggaata tctgagccc taactgtat agggaggti cagaccgtg taatacaaa cttgggtgtg acagatttc tctctt talacclac ttatgtga taattctg tggaaacata ttctgtgg ctgagcagca ggggaaag atagaaata ctgttagcaa gacagatca tctcagaga gttacaagc cagagtgccc agggagaga gaagaagcagc taacacctg ggggtcacag tggtagcatt taigattca tggtaacct atagcatga ttaataat galgcttia tgggtttat aacctgtcc tgtattatg agattgtcg ttgtgtgt tatataact cagccaigaa tcttgtat taagtatt ttaccatg gttaggaa gcaataaag</p>	A	Homo sapiens

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>tatttgaac tggcagggti ttaagaaca gticagcaac catgaatttg ttcttgaac alalataa MSSNSLLVA VQLCYANVNG SCVKIPSPG SRVILYIVFG FGAVLAVFGN LLVMISILHF KQLHSPTNFL VASLACADFL VGVTVMPFSM VRTIVESCWYF GRSFTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP LMYSGAVFT GYVDDGLEEL SDALNCIGCG QTVVNQNWVL TDFLSFFPT FMILYGNJ FLVARQAKK IENTGSKTES SSESYPKARVA RRERKAAKTL GVTVAFMIS WLPYSIDSLI DAFMGFTIPA CTYEICCWCA YVNSAMNPLI YALFYPWFRK AKVIVTGVV LKNSSATMNL FSEHI</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>atgacagca attttccca accgttttg cagotttgt atgagatgt gaatgatct tgaatgaac ctccatfct tcttgggtcc cgggtaatic tgaacagcg gtiagctt gggctttgc tggctgtatt tggaaatcic ttagtaaga ctctgtct tcatuttaag cagctgcact ctcaaccaa ttctctatt gctctcttgg cctgtcttga ctcttggta ggtgtgacgt tgaatctt cagcalgtc aggacgttgg agagctgtc gtiatttga gccaaattt gtaatttca cagttctgt gattgtgcat ttgttactc ttctgtctc cactgtct tcatgtcat cgcaggttac atgttgta ctatccctt ggtatgt accaattga cgtgtctgt gtcgggaat tgcacagcg tgccttggat tctgctctc acgtacagcg gtcgtgtt ciacacaggt gtaacatgt atgggtctga ggaattga agtctctca actgctgtagg tggctgtcaa atattgtaa gtcaaggtc ggtgtgata gatttctgt tattctcat acctaccctt gtiatgaat tcttiacag taagatttt ctatagcta aacacaaagc tataaaatt gaaciacia gtacgaagt agaaatcc tcaagaggti ataaatcag agtgccaaag agagaagga agagaactaa aacctgggg gtcacgtac tagcaattgt tattcatgg tiaccgtata cagtgtatg ataatgtat gctttatgg gcttctgac ccttccctat atctatga ttgtctgt ggtgtctat tataactcag ccatgaatcc ttgtattat gcttattt atcttgggt taggaagacc ataaacta tttaagtg agatgttt aaggctagtt caicaact tagttatt tagaataa</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>MTSNFSQPVV QLCYEDVNGS CIETPSGVS RVILYTFASF GSLLAVFGNL LVMTSVLHFK QLHSPTNFLI ASLACADFL V GVTVMLFMSV RTIVESCWYFG AKFCTLHSCC DVAFCYSSVL HLCFIDRY IVTDPLVYA TKFTVSVSGI CISVSWILPL TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IVSQGWVLI DFLFFIPTL VMILYSKIF LIAKQQAII ETSSKVESS SESYKRVAK RERKAATLG VTVLAFVISW LPTVVDILID AFMGFLTPAY IYEICCWSA YNSAMNPLY ALFYPWFRKA IKLLSGDVL KASSSTISLFL</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>tgcattgtct tctcttctgt ccatgatga ccagttctag tcaagaggti gtcaaccca cctcttttg tattgaatt cctccactg aaagaaatt tcaagaccag galagataa tcatgggtc caaagccctg gccggatgag tgggggtgt ttgatcciaa tgtattcc atgtcagac agaatgttg tggcagaga gaaatgag gcttcaggti caacaagaac tggattcaa actggattg aggaccccca cctttgttaa gtaattat atcttgcagc ctctttcti ctctctta aatgaggaca gaaatccca tacggcagggg tgggtggggag aatcagaat gatacagctg gatacact ctgtttcti ttcccagggg caccagacia gagtttctga gcatggtacc aaccgtcca gttcttgga caaactgac accaatcaac ggacgtggag agactctgt ctaatcag accttgaat taccgtgtc gaotgtatc atttccctg tggactgac aggaagaggg gttgtgtct ggctcttgg claccagat gcaggaagc ctgttccat ctacatcc aacctggccg cagcagacti cctttctc agcttccaga tiatcttgc gcatctacg ctatcaala tcaagcatc catccgaat atctctgtt ctgtgtatc ctttccac tttaagcc ttgatgtct gaggccatc agcaccagc gctgctgtc tgtctgtg ccatgtgt aocgtgtccg ccgccaca cactgtcag cggctgtgtg tgcctgtc tggggctgt cctgtgtt tagatgtc gttgtggaggt tctgtact cctgttatt ggtgtcatt ctatgttg ttgaacgtca gatttccac cagtgcgtg gcgtattt ttatgttg ttctgtgt ttcagccg gttctgttgg tcaagatct ctgtgttcc cggaaagatc cgtgtaccag cgtgtacgt accatctgc</p>	A	Homo sapiens

Homo
sapiens

P

AAK91807.1

MrgX4 G
Protein-Coupled
Receptor

194989

689

tcacagtgct aggtcttcct ccttcgagcc tgccttcggc ccttcgagcc ggcctaatit acagagtgca cctgaatttg gaagcttat
atgtcaltg ttatcgtgt tgcattgccc tgcctctct aaacagtagt gccaacccca tcatctact ctcgtgggc tcccttaggc
agcgtcaaaa taggcagaa ctagagctgg ttctccagag ggcctcgcag gacacagctg aggtgagata aggtgaaggg
cagcttcctg aggaagctt ggcagctcgc ggaagcagat tggggccatg agggagagcc tctgcctcgt cagtcagagc
ggacttgag agcaacacig tcttcgacc ctagacaat acatcggti tcttagctg ttgcctcag aatcgtcga gtagtaact
aagctctca aataaatgt tatcaactt gacagtgca gtttaccac agtgaagca tagtcagac agtacaatgt tgg
MDPTVPVFGT KLTPINGREE TPCYNQTLST TVLTCTISLV GLTGNAVVLW
LLGYRMRRNA VSYLNLAA ADFLFSQI RSPRLINI SHLRKILVS VMTPFYTTGL
SMLSALTER CLSVLWPIWY RCRPHTLSA VVCVLLWGLS LFLSMLEWR
CDFLFGADS SWCETSDFP VAWLFLCWV LCVSSLLVLLV RILCGSRKMP
LTRLVVTILL TVLVFLCGL PFGILGALIN RMHLNLEVLV CHVYLVCMSL
SSLNSSANPI IYFFVQSFQ RQNRQNLKV LQRALQDKPE VDKGEGQLPE
ESLELSGSRLL GP

Homo
sapiens

A

AF411111

G Protein-
Coupled Receptor
GPR82

195015

690

atgaacaaca atacaacaig tatcaacca tctatgatct ctccatggc ttaccaatc attuacatc tctcttgat tgttggtgt
ttgggaaca cttctctca atggalatt ttacaaaaa taggtaaaaa aacatcaacg cacatctacc tgcacactt tgcagtgca
aactacttg tgcagagc calgccttc atgagtatct attcttcgaa aggtttccaa tgggaatac aatcgtcga atgcagagtg
gtcaatttc tgggaactt atccatgat gcaagtagt tgcagatct cttaattta agttgagtg ccaaaagccg ctatgctacc
ttaatgcaaa aggtatcttc gcaagagact actcatgct atgagaaaat attatggc catuacga aaaaatttcg ccagcccaac
ttgctagaa aactatgat ttacatagg ggaagtgtac tgggcataat catccagtt accgtatct actcagtcac agaggctaca
gaaggagaag agagcctatg ctacaatggc cagaaggac taggagccat gatctcag attcaggtc tcatggagc
cacatttat ggatttct tttagtgi actaacaica tactactit ttttagcca tctgaagcca tctgaagaaa atagaacct gtagtccat
taaggagaaa gatttgactt acagtctgt gaagaagact ctttggtga tccagattct actaatagt tgcctcttc ctatagat
ttttaaacc atttttag ttctacaca aagagataac tgcagcaat tgaattatt aatagaaca azaaacatc tcaactgct
tgcctggcc agagtagca cagacccat tatattct ttatagaca aaacattca gaagacata tataatctct ttacaaagc
taattcaga cataagcaat cataagtg a

Homo
sapiens

P

AAL26482

G Protein-
Coupled Receptor
GPR82

195015

691

MNNNTTICQP SMISSMALPI IYLLCIVGV FGNTLSQWIF LTKIGKKTST HIYLSHLVTA
NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTL SMH ASMFVSLLL
SWIAISRYAT LMQKDSOET TSCYEKIFYG HLLKKFRQPN FARKLCIYW GVVLGIIPV
TVVYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFL VLTS
YYSFVSHLRK IRTCTSIMEK DLTYSSVKRH LLVIQILLV CFLPYSIFKP IFYVLHQRDN
CQQLNYLET KNILTCLASA RSSTDPIFL LLDKTFKKTL YNLFTKSNSA HMQSYG

SEQ ID	LSID	Gene	Source ID	Sequence	Code	Species
NO:					Name	
1	127	5-HT1A Receptor	NM_000524	atgagatgtgc tcagccctgg tcagggaac aacacacat caccacggc tcctttgag A accgggggca aactactgg tatctcgac gtgacctca gctacaggt gacacactt ctgctgctgg gcacgtcat ctctgcgc gtgctggga atgctgggt gttggctgct atcgcttgg agcgtccct gcagacgtg gccaatatc ttattggctc ttggcggtc accgacctca tgggtgctg gttgtgctg cccatggccg cgtgtatca gttgctcaac aagtggacac tgggccaagt aactggcag ctgttcacg cctcgaggt gctgtgctg acctcatcca tcttgacct gtgcgcac gcgctgaca ggtactggg caccacggac ccatcgact acgtgaaca gaggcgccc cggcggcgtg cgtcatatc gctcacttg ctattggct tctcatctc tatccgccc atcctgggt ggcgcacccc ggaagaccg tcggacccg acgatgcac cattagcaag gactatggt acatcataa ttccacctt ggagctttct acatccgct gctgctcatg ctggttctct atggcgcat attcagact ggcgcttcc gcacgcgaa gacgtcaaa aggtggaga agaccggag gacacccg catggagcat ctccgccc gcagcccaag aagagtgtga atggagagtc gggagcagg aactggaggc tgggctgga gagcaaggct ggggtgctc tgtgcgcaa tggcgcggtg aggaagggt acgatggcg cgcctggag gtgatcgag tgaccgagt gggcaactc aagagcact tgcctctgc cagcaggct ggtctaccc ctgtgccc cgcctcttc gagaggaaa atgagcgcaa cgcgaggcg agcgcaaga tggccctggc cggagagag aagacagtga agacgtgg catcatcatg ggcacctca tctctgtg cgtgccctc ttcacgtgg ctctgttct gccctctgc gagagcagt gccacatgc cactgttg ggcgcataa tcaattggt gggctactc aactcttgc ttaacccgt cattacgca tacttcaaca aggacttca aaacgggtt aagaagatca ttaagtgtaa ctctgcgcg cagtga	Homo	sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVLSPGQN NTTSPAPFE TGGNTTGISD VTVSYQVITS LLGLTIFCA VLGNACVAA P IALERSLQNV ANYLIGSLAV TDLMSVLVL PNAALYQVLN KWTLGQVTC LFIALDVLCC TSSILHLCAI ALDRYWAITD PIDVYKRTF RPRALISITW LIGFLISIPP ILGWRTPEDR SDPDACTISK DHGTYISTF GAFYIPLILM IVLYGRIFRA ARFRIRKTVK KVENTGADTR HGASPAPOPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGN KEHLPLPSEA GTPPCAPASF ERKNERNAEA KRKMALARER KTVKTLGIIM GTFILCWLFP FIVALVLPPC ESSCHMPTLL GAIINWLGYS NSLLNPVIYA YFNKDFQNAF KKIICNFCR Q	Homo	sapiens
3	128	5-HT1B Receptor	NM_000863	atggaggaac cgggtgctca gtgcgtcca cgcgcgcgc cgggtccga gacctgggtt A cctcaagcca acttatctc tgcctcctc caaaactga gcgccaagga ctacatttac caggactcca tctccatcc ctggaagta ctgctgggta tgcatttggc gctcatcac ttggccacca cgtctccaa tgccttctg attgccacg tgcaccggac cggaaactg caaccccg ctaactacct gatcctct ctggcggtca cgcactgt tgtgtccatc ctggtgatgc ccatcagcac catgtacact gtcaccggcc gctggacact gggcagggtg gctgtgact tctggctgtc gtcggacatc acttgttga ctgcctccat cctgcacctc tgtgtcatcg cctggaccg ctactggcc atcacggag cgtggagta ctcagctaaa agactccca agaggcggc ggtcatgata cgcgtggtgt ggtctcttc catctctatc	Homo	sapiens

Homo
sapiens

NP_000854.1 5-HT1B Receptor

128

4

tggtgctgcgc cttctctctg ggtcagggt aagccggaag aggaggtgtc ggaatgctg
gtgaacacgc accacatct ctacacggtc tactcacgg tggtgtcttt ctacttccc
acctgctcc tcatgacct atcagcgc atcagtag aagccgctc cggattttg
aaacagagc cgaacagac cgaacagc ttgacccgag ccagctgat accgactcc
cccgggtcca cgtcctcgtt cactctatt aactcggg ttcccagct gccagcgaa
tccggatctc ctgtgtatg gaaccaagtc aaagtgcgag tctccgacg cctgctgaa
aagaagaaac tcatggcgc tagggagcgc aaagcacc aagccctagg gatcatttg
ggagcctta ttgtgtgtg gctaccctt ttcacatct cctagtgat gcctatctg
aaagatgct cgtggttcca cctagccatc ttgacttct tcacatggt gggctatct
aactccctca tcaaccccat aactatatac atgtccaatg aggactttaa acaagcattc
cataaactga tagcttttaa gtgcacaagt tga
MEEPGAQCAP PPAGSETWV PQANLSSAPS QNCSAKDYIY QDSISLPWKV LLMVLLALIT P
LATLSNAFV IATVYTRKL HTPANYLIAS LAVTDLIVSI LVMPISTMYT VTGRWTLGOV
VCDFWLSDDI TCTASILHL CVIALDRYWA ITDAVEYSK RTPKRAVMI ALWVFSISI
SLPPFFWRQA KAREEVSECV VNTDILYTV YSTVGAFYFP TLLILALYGR IVEARSRL
KQTPNRTGKR LTRAQLITDS PGRSSVTSI NSRVPDVPSE SGSPVYNQV KVRVSDALLE
KKKLMAARER KATKTLGIIL GAFIVCWLPE FIISLVMPIK KDACWFLAI FDFFTWLGYL
NSLINPIYT MSNEFKQAF HKLIRFKCTS

NM_000864

5-HT1D
Receptor

129

5

Homo
sapiens

A

agccaaatgt gggaggtct gtggaagag agagccacct agcatgtccc cactgaacca
gtcagcagaa ggccttccc aggagggctc caacagatcc ctgaatgcca cagaaacctc
aggagcttg gatccagg cccctcagg gctcaagatc tccctgtccg tggctcttc
cgtcataca ctggccacag tccctccaa tgccttgta ctacaccca tctactaac
caggagctc cacacccctg ccaactacct gattgctcc ctggccacca cgcacctct
ggtttccatc ttggtaatg ccatcagcat cgcctatac atcacccaca cctggaactt
tgcccaaatc ttgtgtgaca tctgctgtc ctctgacatc acgtgctgca cagcctccat
cctgcatctc ttgtgtcatt ctctggacag gtactgggca atcacagatg ccttgaata
cagtaaacgc aggacgctg gccacgctg caccatgac gccattgtct gggccatctc
catctgcac tccatcccc cgtcttctg gcggcaggcc aagcccagg aggagatgc
ggactgtctg gtgaacacct ctacagatct ctacacatc tactccacct gtggggcctt
ctacattccc tctgtgtg tcatatct atagggcgg atctacggg ctgcccggaa
ccgcatcctg atccacacct cactctatg gacgcttc accacggcc acctcatc
aggctctgcc ggtcctcgc tctgtcgtc caactccag ctccatgag ggactcgca
ctcggctggc tccctctct tttcaacca cgtgaaatc aagctgtctg acagtgcct
ggaaagcaag agatttctg ctgctcaga aaggaagcc actaaatcc tgggcatgat
tctgggggcc ttatcatct gctgctgct tctcttcgt gtgtctctg tctccccc
ctgcccggac tctgctgga tccacccgc gctcttgac tcttccacct gctaggcta
tttaaacctc ctcatcaatc caataatca cactgtgtt aatgaagagt tccggcaagc
ttttcagaaa attgtccct tccggaagc ctctagtct tattcgatga gtaaaagaa
MSPLNQSAEG LPQASNRSL NATETSEAWD PRTLOALKIS LAVLSVITL ATVLSNAFVL P
TTILLTRKLH TPANYLIGSL ATTDLIVSIL VMPISATYTI THTWNFGQIL CDWLSSDIT
CCTASILHLC VIALDRYWA I TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWROAK

NP_000855.1

5-HT1D
Receptor

129

6

Homo
sapiens

Homo
sapiens5-HT1E
Receptor
NM_000865

130

7

AQEMSDCLV NTSQISYTIY STCGAFYIPS VLLIILYGR YRAARNRIIN PPSLYGKRFT
 TAHLITGSAG SSLCSLNSSL HEGHSAGS PLFENHVRIK LADSALERKR ISARERKAT
 KILGIIILGAF IICWLPFFV SLVLPICRDS CWIHPALFDF FTWLGYNLSL INPIITYTVFN
 EEFRAFOKI VPFKAS
 atcgaatgtt gagaagaagca gtgctctgat ccagctcagg agaaaaagga gcggttccg A
 agtgagactt ctggagccag ctggacgtgc cggtttgccc agtgcggcgc ggctgcacgc
 accgtccaca agagtctcag tcgccaggc tggagtgcag cagcacagtc tcacctcatt
 gcaacctcgc cctccgggt tcgcggttc tccgctcag cttcctagta gctgggattg
 caggcactca ccaccatgcc cggctaattt ttgaaattt tagtggagac gggatttcac
 catgttgcc atgtgtgtct tgaaccccg acctggatg attgcgccg ctcggcctcc
 caagtgtg gaattacag gaaacctca ctcaagaagaa atgtgtggc cctcccttt
 accaacagaa aatggaacac aagagaccac atagctgaac aaattatagc ctcctacaa
 gtgagaacc ttcgaggcta catagtttc agccaaagga aaataaccaa cagcttctcc
 acagtgtaga ctgaacaag ggaacatga acatcacaaa ctgtaccaca gaggccagca
 tggctataag accaagacc atcactgaga agatgtcat ttgcatgact ctgggtgtca
 tcaccacct caccagttg ctgaacttg gtgtgatcat gctatttggc accaccaaga
 agctccacca gctgccaac tacctaact gtctctggc cgtgacggac ctctgggtg
 cagtgtctg catgcccgt agcatcatc acattgtcat ggtcgtctg aagttgggt
 acttctctg tgaagtgtg ctgagtgtg aattgacct ctgacacctg tccatctcc
 acctctgtg cattgccctg gacaggtact ggccatcac caatgtctt gaatagcca
 ggaagaggac ggccaagag gccggtga tgatcctac cgtctggacc atctccatt
 tcatctcat gccctctg tcttgagaa gcaacgcgc ctaagccct cccctagtc
 agtgcacct ccagcagac catgttatc acacattta ctccacgtg ggtgcgtttt
 atatccctt gactttgata ctgattctc attaccggat ttaacacgc gccaaagacc
 tttaocagaa aagggatca agtcggact taagcaacag aagcacagat agccagaatt
 ctttgcaag ttgtaactt acacagact ttgtgtgtc tgacttctc acctcagacc
 ctaccacaga gttgaaaag ttccatgctt ccactcagat cccctctt gacaatgac
 tagatcaccc aggagacgt cagcagatct ctagcacccag ggaacggaa gcagcacgca
 tcttggggt gattctgggt gattcattt tatctggct gccattttc atcaagagt
 tgattgtgg tctgagcac tacacgtgt cctcggaagt ggcgacttt ctgacgtggc
 tcggttatgt gaattctctg atcaacctc tgctctatac gatttttaaat gaagacttta
 agctggcttt taaaaagctc attagatgcc gagagcatat ttagactgta aaagctaaa
 aggcagact tttccagag cctcatgagt ggaagggtt aaggggtgca acttattaat
 tcttgaacat acttggttca ggagagtttg taagtatg tggtcttgg tcttggttg
 ttgtttgtt ttgtctgtt ttgttgagg attgtattt ggcgtgctg ttctacctc
 tggcttatc tgtgatacat aattcaaat aaacattatc atacaaaac aaaaaaaa
 aaaaaaaa

Homo
sapiens5-HT1E
Receptor
NP_000856.1

130

8

SMAIRKTIIT ERMICMTIV VITLTTLIN LAVMAIGTT KKLHQPANYL P
 ICSLAVTDLL VAVLVNPLSI IYIVMDRWKL GYFICEWLS VDMCTCTCSI LHLCVIALDR
 YWAITNAIEY ARKRTAKRAA LMILTWTIS IFISMPPLFW RSHRLSPPP SQCTIQDHDV
 IYTIYSTLGA FYIPLTLLI LYRIYRAAK SLYQKRGSSR HLSNRSTDSQ NSFASCKLTQ

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDFTS DPTTEFEKH ASIRIPPF DN DLDHPGERQQ ISSTRERKAA RILGLILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLGYNLSLIN PLIYTSFNEF FKLAFKKLIR CREHT</p> <p>atggattttc taaattcatc tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgtgtgc cctcactctg tctgggctgg cactgatgac acaactatc aactcccttg tgatcgctgc aattatttg acccggaagc tgcaccatcc agccaattat ttaaatttgt ccttgccagt cacagatttt cttgtggctg tctgggtgat gcccttcagc attgtgtata ttgtgagaga gagctggatt atggggcaag tggctctgga catitggctg agtgttgaca ttacctgtg cactgtctc atcttgcat tctcagctat agctttggat cggatcgag caatcacaga tgcgtgtgag tatgccagga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttggattata tctgttttta tctctatgcc tctctattc tggaggccac aaggaaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagctttc tacatccac tggcattgat ttgatcctt tactacaaa tatatagagc agcaagaca ttataccaca agagacaagc aagtaggatt gcaagaggag aggtgaatgg ccaagtctt ttggagagtg gtgagaaaag cactaaatca gtttccacat cctatgtact agaaaagtct ttatctgacc catcaacaga ctttgataaa attcatagca cagtgagaag tctcaggtct gaattcaagc atgagaaatc ttggagaagg caaaagatct caggtacaaag agaacggaaa gaagccacta ccttgggatt atcttgggt gcatttgtaa tatgttgctg tctttttttt gtaaaagaat tagttgttaa tctctgtgac aaatgtaaaa ttctggaaga aatgtccaat tttttggcat ggcttgggta tctaatcc cttataaatc cactgatitca cacaatcttt aatgaagact tcaagaaagc attccaaaag cttgtgcgat gtcgatgtta g</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>LICSLAVTDF LVALVMPFS IVYIVRESWI MGQVVCIDWL SVDITCCTCS ILHLSAIALD RYRAITDAVE YARKTPKHA GIMITIVWII SVFISMPPLF WRHQGTSRSD ECIHKDHIV STIYSTFGAF YIPLALIL YKYIYRAKT LYHKROASRI AKEEVNGQVL LESGEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSLSR EFKEKSWRR QKTSGRERK AATTGLIIG AFVICWLPFF VKELVVNVCD KCKISEMSN FLAWLGYLNS LINPLIYTF NEDEKKAFOK IVRCRC</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtctt tctacacctc atctgtaca agttctggt tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactaag aactccctaa tgcaattaaa tgatgacacc aggcctaca gtaatgactt taactctgga gaagctaa cttctgatgc atttaacagg acagtcgact ctgaaaaatcg aaccaacctt tctgtggaag ggtgcctctc accgtcgtgt cctccttac ttcactcca ggaaaaaac tggctgctt tactgacagc cgtagtattt atttaacta ttgctggaaa catactcgtc atcatggcag tgtccctaga gaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatatgct gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accggtggcc tctgccgagc aagctttgtg cagctcggat ttacctggac gtgctcttct ccacggcctc catcatgeac cctcgcgcca tctcgtgga ccgtacgtc gccatccaga atcccatoca ccacagccgc ttaactcca gaactaaggc</p>	Homo sapiens

atttctgaaa atcattgctg ttggaccat atcagtaggt atatccdtgc caataccagt
 ctttgggcta caggacgatt cgaaggtctt taaggagggg agttgcttac tggccgatga
 taactttgtc ctgtcggtct ctttgtgtc attttcatt ccttaacca tcatggtgat
 cactacttt ctaactatca agtcaactca gaaagaagt ctttgtgtg taagtgtat
 tggcacacgg gccaaattag cttctttcag cttctccct cagagtctt tgtcttcaga
 aaagctcttc cagcggtcga tccataggga gccagggtcc tacacaggca ggaggactat
 gcagtcacat agcaatgagc aaaggcagc caaggtgctg ggcagctctt tcttctgtt
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 ccttcaaacg aaatggctcg gccaggcagc gaggctctg catgtaatcc tagcaccttg
 ggaggctgag atgggaggat cacttgagc caagattttg agaccaactt ggttaacaaa
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 actgtgttcc cagctaaggg gaggctgag acgcaaggat cacttgagcc cagaagctca
 aggtgcaat gagccaagt cacaccactg ccatttctc ctgggcaaca gagtgaacc
 ctatcacccc gaattc

Homo
sapiens

NP_000612.1 MDILCEINTS LSSTNSLMQ LNDPRLYSN DENSGEANTS DAFNWTVDSE NRTNLSCEG P
 LSPCLSLIHL IQKNWSALL TAVVILTIA GNILYIMAYS LEKKLQATN YFILMSLAYD

5-HT2A
Receptor

12 132

13	133	5-HT2B Receptor.	NM_000867	<p>MLLGFLVMPV SMLTILYGYR WPLPSKICAV WIYLDVLEST ASIMHLCAIS LDRYVAIQNP IHSRENSRT KAFLKIIAVM TISVGISMPI PVFGLQDDSK VFKEGSCILA DMNFVLIGSF VSFPIPLTIM VITYELTIKS LQKEATICVS DLGTRAKLAS FSELPQSSIS SEKLFORSIH REPGSYTGRR TMOQISNEQK ACKVLGIVFF LFVVMWOPFF ITNIMAVICK ESCNEDVIGA LLNVEFWIGY LSSAVNPLVY TLENKYRSA FSRVIOQYK ENKKPLQLIL VNTIPALAYK SSQLQMGQKK NSKODAKTTD NDCSMVALGK QRSEERAKDN SDGVNEKRVSC V</p> <p>tactaaccat gctgaccact gttcggaacg ggattgaatc acagaaaac agcaaatggc A tctctcttac agagtgtctg aacttcaag cacaattcct gaggacattt tgcagagcac ctttgttccac gttatctctt ctaactgttc tggattacag acagaaatcaa taccagagga aatgaaacag atgtgtgagg aacagggaat taaactgcac tgggcagctc tcttgatact catgggtgata ataccacaa ttgttggaat taccctgtt attctggctg ttccactgga gaagaagctg cagtatgcta ctaattactt tctaattgcc ttggcgtgtg cttgatttgc ggttggattg ttgtgatgc caattgccct cttgacata atgtttgagg ctatgtggcc ctcccaactt gttctatgac ctgctgtgtt attcttgac gttctcttt caaccggcgc catcatgcat ctctgtgcca ttctagtgga tctgtacata gcatcaaaa agcaaatcca ggccaatcaa tataactcac gggtcacagc attcatcaag attacagtgg ttgtgttaat ttcaataggc attgccattc cagtcctcat taaagggata gagactgatg tggacaaccc aaacaatatc acttggtgac tgacaaggga acgttttggc gatttcagtc tctttggctc actggctgcc ttcttcacac ctcttgcaat tatgtatgct acctacttc tcaatcca tgctttacag aagaaggctt acttagtcaa aaacaaggca cctcaacgcg taacatggtt gactgtgtct acagtttcc aaaggatga aacaccttgc tctcacccg aaaaaggtggc aatgctggat gttctcgaa aggaacaggc tctgccaac tcaggtgatg aaacacttat gggaagaaca tccacaattg gaaaaagtc agtgcagacc atttccaaag aacagagagc ctcaaaagtc ctagggtatg tgttttctc ttttttctt atgtgtgtgc ccttctttat tacaaatata actttatgtt tatgtgatc ctgtaaccaa actactctcc aatgctctc ggagataatt gtgtggatag gctatgttgc ctgagagatg aatcctttgg tctacacct cttcaataag acatttcggg atgcatttgg ccgatatatc acctgcaatt accggggcac aaagtcagta aaactctca gaaaacgctc cagtaagatc tacttccgga atccaatggc agagaactct agttttttca agaaacatgg aattcgaaat gggattaaac ctgccatgta ccagagtcca atgaggtccc gaagttcaac cattcagctc tcaatcaatca tctactaga tacgcttctc ctcaactgaa atgaaggtga caaaactgaa gagcaagtta gttatgtata gcagaactgg cagtgtgcat caacataat gatgagtaag atgatgaatg agatgtaaat gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct aagatgtaag tattaagaat actaatttt cctaatttgg acaagattat tccatgagga aaataatttt atatagctac aaatgaaaac aatccagcac tctgggttaa ttttaagga ttcgaatgaa ataaagtcaa atcaataat ttcaggcttt aaaaaaaa</p> <p>NP_000858.1 MALSYRVSEL QSTPEHILQ STFVHVISSN WSLQRESIP BEMKQIVVEQ GNKLHWALL P ILMVIPTIG GNTIVILAVS LEKKIQYATN YFLMSLAVAD LLVGLFWMPI ALLTIMFEM WPLPLVLCPA WLFIDVLFST ASIMHLCAIS VDRYIAIKKP IQANQVNSRA TAFIKITVW LISIGIAIPV PIKGIETDND NPNNITCVLT KERFGDFMLF GSLAAFTPL AIMIVTYFLT IHALQKKAYL VKNKPPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>MLLGFLVMPV SMLTILYGYR WPLPSKICAV WIYLDVLEST ASIMHLCAIS LDRYVAIQNP IHSRENSRT KAFLKIIAVM TISVGISMPI PVFGLQDDSK VFKEGSCILA DMNFVLIGSF VSFPIPLTIM VITYELTIKS LQKEATICVS DLGTRAKLAS FSELPQSSIS SEKLFORSIH REPGSYTGRR TMOQISNEQK ACKVLGIVFF LFVVMWOPFF ITNIMAVICK ESCNEDVIGA LLNVEFWIGY LSSAVNPLVY TLENKYRSA FSRVIOQYK ENKKPLQLIL VNTIPALAYK SSQLQMGQKK NSKODAKTTD NDCSMVALGK QRSEERAKDN SDGVNEKRVSC V</p> <p>tactaaccat gctgaccact gttcggaacg ggattgaatc acagaaaac agcaaatggc A tctctcttac agagtgtctg aacttcaag cacaattcct gaggacattt tgcagagcac ctttgttccac gttatctctt ctaactgttc tggattacag acagaaatcaa taccagagga aatgaaacag atgtgtgagg aacagggaat taaactgcac tgggcagctc tcttgatact catgggtgata ataccacaa ttgttggaat taccctgtt attctggctg ttccactgga gaagaagctg cagtatgcta ctaattactt tctaattgcc ttggcgtgtg cttgatttgc ggttggattg ttgtgatgc caattgccct cttgacata atgtttgagg ctatgtggcc ctcccaactt gttctatgac ctgctgtgtt attcttgac gttctcttt caaccggcgc catcatgcat ctctgtgcca ttctagtgga tctgtacata gcatcaaaa agcaaatcca ggccaatcaa tataactcac gggtcacagc attcatcaag attacagtgg ttgtgttaat ttcaataggc attgccattc cagtcctcat taaagggata gagactgatg tggacaaccc aaacaatatc acttggtgac tgacaaggga acgttttggc gatttcagtc tctttggctc actggctgcc ttcttcacac ctcttgcaat tatgtatgct acctacttc tcaatcca tgctttacag aagaaggctt acttagtcaa aaacaaggca cctcaacgcg taacatggtt gactgtgtct acagtttcc aaaggatga aacaccttgc tctcacccg aaaaaggtggc aatgctggat gttctcgaa aggaacaggc tctgccaac tcaggtgatg aaacacttat gggaagaaca tccacaattg gaaaaagtc agtgcagacc atttccaaag aacagagagc ctcaaaagtc ctagggtatg tgttttctc ttttttctt atgtgtgtgc ccttctttat tacaaatata actttatgtt tatgtgatc ctgtaaccaa actactctcc aatgctctc ggagataatt gtgtggatag gctatgttgc ctgagagatg aatcctttgg tctacacct cttcaataag acatttcggg atgcatttgg ccgatatatc acctgcaatt accggggcac aaagtcagta aaactctca gaaaacgctc cagtaagatc tacttccgga atccaatggc agagaactct agttttttca agaaacatgg aattcgaaat gggattaaac ctgccatgta ccagagtcca atgaggtccc gaagttcaac cattcagctc tcaatcaatca tctactaga tacgcttctc ctcaactgaa atgaaggtga caaaactgaa gagcaagtta gttatgtata gcagaactgg cagtgtgcat caacataat gatgagtaag atgatgaatg agatgtaaat gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct aagatgtaag tattaagaat actaatttt cctaatttgg acaagattat tccatgagga aaataatttt atatagctac aaatgaaaac aatccagcac tctgggttaa ttttaagga ttcgaatgaa ataaagtcaa atcaataat ttcaggcttt aaaaaaaa</p> <p>NP_000858.1 MALSYRVSEL QSTPEHILQ STFVHVISSN WSLQRESIP BEMKQIVVEQ GNKLHWALL P ILMVIPTIG GNTIVILAVS LEKKIQYATN YFLMSLAVAD LLVGLFWMPI ALLTIMFEM WPLPLVLCPA WLFIDVLFST ASIMHLCAIS VDRYIAIKKP IQANQVNSRA TAFIKITVW LISIGIAIPV PIKGIETDND NPNNITCVLT KERFGDFMLF GSLAAFTPL AIMIVTYFLT IHALQKKAYL VKNKPPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	V	LMRRTSTIGK KSVQTSISNEQ RASKVLGIVF FLELMWCPE FITNITIVLC DSCNQTTILQM LLEIFWVIGY VSGGNPLVY TLFNKTRDA FGRYITCNRYR ATKSVKTRK RSKYIFRNP MAENSKFFKK HGRNGINEA MYQSPMLRS STIQSSIIIL LDTLLLTENE GSKTEEQVSY	Homo sapiens
					accgcgcga ggtaggcgct ctggtgcttg cggaggacgc ttccttcttc agatgcacgc A atcttccga tactgccttt ggagcgcta gattgtagc ctgtgctgctt ccattggcct gccttgcccc ttacctgccc attgcatacg aactctctt ctgtctgtac atcgttctcg tcggagtcgt cgcgatcgtc gtggcgctcg tgtgtaggccc ttogtccggt tagagttagtg tagttagtta ggggcccaac aagaagaaag aagacgcgat tagtgcagag atgctggagg tggtcagtta ctaagctaga gtaagatagc ggagcgaata gagccaaacc tagccggggg ggcacggtc accaaagga ggtcgactcg ccggcgcttc ctatcgccc gagtccctc cattctctc cctccgcga ggcgagaggt tgcggcggc agcgagcgc agtcagcgc accgactgcc cggggtccg ctggcgatt gcagcgagt ccgtttctcg tctagctgcc ggcgcggcga ccgctgcctg gtcttctcc cggagcgtag tgggttatca gctaacacc ggagcatct atacatagc ccaactgacg ccactctca aaacaaacta aggatgata tgatgaacct agcctgttaa ttctgtcttc tcaatttaa actttgggtt ctaagactg aagcaatcat ggtgaacctg agaatgcgg tgcattcatt ccttggtgac ctaattggcc tattggtttg gcaatgtgat attctgtga ccttcaaat tccagcggg ggtacaaaac tggccagcac tcaatacctc cgatgtgtga cgttcaaat tccagcggg ggtacaaaac tggccagcac tttcaatcgt catcataata atcatgaca taggtggcaa catccttctg atcatggcag taagcatgga aaagaaactg cacaatgcca ccaattactt ctaaatgtcc ctgcccattg ctgatatgct agtgggacta ctgtctatgc cctgtctct cctggcaatc cttatgatt atgtctggcc actacctaga tatttctgccc cgtctgtgat ttcttttagat gttttatttt caacagcgtc catcatgac ctctcgctga tatcgctgga tgggtatgta gcaatacgt atctattga gcatagcctg ttcaattcgc ggaactaagg catcatgaag attgctattg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg aggcaggaag aaaaggtgtt cgtgaacaac acgacgtgcg tgcatacga ccaaatcttc gttcttattg ggctcttctg agcttcttc ataccgtga cgattatggt gattacgtat tgcctgacca ttctacgttct gcgcgacaa gctttgatgt tactgcagg ccacaccgag gaacgcctg gactaagtct ggatttctg aagtgtgca agaggaatac ggccgaggaa gagactctg caaaccttaa ccaagaccag aacgcagcc gaagaaagaa gaggagagaga cgtctaggg gcaccatgca ggctatcaac aatgaagaa aagcttcgaa agtcttggg attgtttct ttgtgttct gatcatgtg tgcctatttt tcatccaa tttctgtct gttctttgtg agaagtctg taaccaaaag ctcatggaaa agcttctga ttgtttgtt tggattggct atgtttgtc aggaatcaat cctctgtgt atactctgt caacaaatt taccgaagg cattctccaa ctatttgcgt tgcattata aggtagaga aaagcctcct gtcaggcaga ttccaaagat tgcgcccact gctttgtctg ggaggagct taatgttaac atttatcggc ataccaatga accgtgatc gagaagcca gtgacataga gccgggtata gagatgcaag ttgagaattt agagtacca gtaaatcct ccagtggtgt tagcgaagg atttagcgtg tggagaaag aacagcacag tcttttcta cgttacaagc tacatatga ggaattttt cttctttaat ttttctgtt gctttaacta atgtaaatat tgctgtctga aaagtgttt	

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tattatatat gtaatatctg tgaagacacg ttcaacagac tgccttatat tattttctgt
aattctctc cttgtcaca tggattttt tgtgaatggt tgcaagtgt tgtcttattc

16	134	5-HT2C Receptor	NP_000859.1	ctaatctctg tatgttatcc actacaggtt ttatgagact tcctattaat ttattaaatt tattaaatgt tgaaaaaaaa aaaaaaaa aaaa VIIIINTIGG NLIVIMAVSM EKKLHNATNY FLMSLAIDM LVGLVMPLS LLAILYDVW PLPRYLCPW ISLDVLFSTA SIMHLCAISL DRYVAIRNPI EHSRENSRTK AIMKIAIWA ISIGSVPIP VIGLRDEKV FVNNTCVLN DPNFLIGSF VAFPIPLTM VITYCLTIYV LRQALMLH GHTEEPGSL LDELKCKRN TAEENSANP NQDNARRK KKERRPRGTM QAINNERKAS KVLGIVFVF LIMWCPFFIT NILSVLCEKS CNQKLMKLL NVFVWIGVC SGINPLVYTL FNKIYRRAPS NYLRCNYKVE KPPVVRQIPR VAATALSRE LNVNIYRHTN EPVIERASDN EPGIEMQVEN LELPNPSSV VSERISSV cgggtcattat ttctgttaat ggacaaactt gatgctaag tgagttctga ggaggggttc A gggtcagtg agaaggtggt gctgctcacg ttctctcga cggttatcct gatggccatc ttgggaacc tctggtgat ggtgctgtg tgctggaca ggcagctcag gaaaaataaa acaaattatt tcaattgata tctgtcttt gcggatctgc tggttcgggt gctggtgatg ccctttggtg ccattgagct ggtcaagac atctggattt atgggaggtt gttttgtctt gttcggacat ccttgagct cctgctaca acggcatcga ttttccact gtgctgcatt tctctgata ggtattacgc catctgctgc cagcctttgg tctataggaa caagatgacc cctctggca tgcattaat gctggaggc tgcgggtca tocccacgtt tattctttt ctccctataa tgcaagctg gaataacatt ggcataattg atttgataa aaagaggaa ttcaaccaga actctaacgc tactactgt gtctcatgg tcaacaagcc ctacgcccac acctgctctg tggggcctt ctacatccca ttctctcca tgggtctggc ctattacccg atctatgtca cagctaagga gcatgcccc catatccaga tgttaacacg ggcaggagcc tcctccaga gcaggcctca gtcggcagac cagcatagca ctcatecat gaggacagag accaagcag caagaccct gtgcatcctc atgggttgc tctgctctg ctgggcacca ttctttgtca ccaatattgt ggtacctttc atagatata cgtccctgg gagggtggtg actgctttcc tctggctgg ctatatcaat tccgggtga accctttct ctacgcttc ttgaataagt cttttagacg tgccttctc atcatctct gctgtgatga tgagcgtac cgaagacctt ceattctgg ccagactgc cctgttcaa ccacaacct taatggatcc acacatgtac taaggatgc agtgagtggt ggtggccagt gggagagtca tgtcacccg ccagcaactt ctcttttgt gctgctcag ccagtgaca cttaggcccc tgggacaatg accagaaga cagccatgcc tccgaaagag gccaggtcc taagctgctg ctgtgctgg actgcaccg gcattctct cactgaggc ttccgtccg ccagtgagg aaccgggtg tcgctggg	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	SLAFADLLVS EEGFGSVEKV VLLTLSTVI LMAILGNLLV MVAVCWRQL RKIKNYFIV P AICCPLYR NMTPLRIAL MLGCGVIPT FISFLPMQG WNNIGTDLI EKKFNQNSN STYCVFMVNK PYAITCSVA FYIPFLMVL AYRIYVYAK EHAHQIOMIQ RAGASSESP QSAQHSSTHR MRTETKAAT LCIINGCFCL CWAPFFVNI VDPFIDYVTP GQVWTAFLWL GYNSGLNPF LYAFLNKSR RAFLILCCD DERYRRPSIL GQTVPCSTTT INGSTHVLRD AVECGGWES QCHPATSPV VAAQPSDT cccagagagg ccattacc ccctcacc accctcccgc gttcccactt ccccgactc A	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	MDKLDANVSS SLAFADLLVS EEGFGSVEKV VLLTLSTVI LMAILGNLLV MVAVCWRQL RKIKNYFIV P AICCPLYR NMTPLRIAL MLGCGVIPT FISFLPMQG WNNIGTDLI EKKFNQNSN STYCVFMVNK PYAITCSVA FYIPFLMVL AYRIYVYAK EHAHQIOMIQ RAGASSESP QSAQHSSTHR MRTETKAAT LCIINGCFCL CWAPFFVNI VDPFIDYVTP GQVWTAFLWL GYNSGLNPF LYAFLNKSR RAFLILCCD DERYRRPSIL GQTVPCSTTT INGSTHVLRD AVECGGWES QCHPATSPV VAAQPSDT cccagagagg ccattacc ccctcacc accctcccgc gttcccactt ccccgactc A	Homo sapiens
19	138	5-HT6	NM_000871	cccagagagg ccattacc ccctcacc accctcccgc gttcccactt ccccgactc A	Homo

11

21	139	5-HT7 Receptor	NM_000872	ccatgggcag cggcacacag cggcgcatg atggacgtta acagcagcgg cggcccgagc acctccgctc ttctctctg ccagaagtgg ggcgcgggct gcccgacttg agccccgag gtggcgccga ccggtcgcg ggtctctgg cgcgcacct gctgagcgag gtgacagcca gccgcggcc cacttgggac ggcgcggcg acaatgctc cggctgtggg gaacagatca actacggcag agtcgagaaa gtgtgtatg gctccatct cagctcatc agctgtctga cgaatcgagg caactgcctg gtgtgatct cgtgtgtctt cgtcaagaag ctccgcagc cctccaaacta cctgactgtg tccctggcg tggcgacct ctcgtggct gtggcggtca tgcctctct cagctcacc gactcatcg gggcgaagtg gatctttgga cactttttct gtaatgtct catcgccatg gactcatgt gctgcagcgc ctcgactatg acctgtgcy tgatcagcat tgacaggtac cttgggatca caagccct cactacacct gtgaggcaga atgggaaatg catggcgaag atgattctct cgtctggct tctctcgcc tccatcact taactccact ctttggatgg gctcagaatg taaatgata taagtgtgc ttgatcagcc agacttttg ctatacatt tactctacc cagtggcatt ttatatcccc atgtccgtca tgcctttcat gtactaccag attacaagg ctgccaggaa gactgtgccc aaacacaagt tctctgctt cctcgagtg gagccagaca ggtctatcgc cctgaatggc atagtgaagc tccagaagga ggtggaagag tgtgcaaac ttctgagact cctcaagcat gaaaggaaaa acatctccat ctttaagcga gaacagaaa cagccaccac cctggggatc atcgtcgggg cctttacgt gtctggctg ccattttcc tctctcgac agccagaccc ttcactctgt gcaactctg cagctgcac ccaactgggg tggagaggac attctgttg ctaggctatg caaactctc cattaacct ttatatatg ccttcttcaa cgggagactg aggaccact atcgcagcct gctccagtc cagtaccgga atatacccg gaagctctca gctgcaggca tgcataagc cctgaagctt gctgagaggc cagagagacc tgagttgtg ctacaaaaatg ctgactactg tagaaaaaaa ggtcatgatt catgattgaa agcagaacaa tggag	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	DAPPDNSSRP DLYGHLRSFL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASPAPTW P VSLALADLSV AVAVMPFVSU TDLLGGKWIF GHFFCNVFA MDVMCCFASI MTLCVISIDR YLGITRPLTY PVRQNGKCMV KMILSWLLS ASITLPLFG WAQNVNDKV CLISQDFGYT IYSTAVAFYI PMSVLMFYI QIYKAARKSA AKHKFPGFPR VEPDSVIAIN GIVKLOKEVE ECANLSRLIK HERNISIFK REQKAATTIG IIVGAFV/CW LPFFLLSTAR PFICGTSCSC IPIWVERTEL WLGYNLSLIN PFIYAFENRD LRTTYRSILQ CQYRNINRKL SAAGMHEALK LAERPERPEF VLQVADYCRK KGHDS	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674	atgagtgatca gaagtgtgaa ggggtcctgt tctgaatccc agagcctct ctcctctgtt gaggtctgga ggtgaggaa ggttaacct cactgaacag aatccctgga gtagcggct gctgaaggcg tgcaggtgtg ggggcacttg gacagaacag tcaggcagcc gggagctctg ccagctttgg tgaccttggg ccgggctggg agcgtctgg cgggagcggg aggactatga gctgccggc gttgtccaga gccagccca gccctacgcy cgcggcccg agctctgttc cctggaaact tgggcactgc cctctggacc cctgcggcc agcaggaggg atggtgttg cctcgtgccc cttggtgccc gctcgtgat gtgccagcc tgtgccgccc atgccccc ccatctcagc ttccaggcc gcctacatcg gcatcaggt gctcagccc ctggtctctg tgccccggaa cgtgctggtg atctggcggtg tgaagtgtgaa ccaggcgctg cgggatgcca	Homo sapiens

ccttctgctt catcgtgtcg ctggcggtgg ctgagtggc cgtgggtgccc ctggteatcc
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 acaagccag catccttacc tacattgcca tctctctcac gcaggccaac tggccatga
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 atgacattt ccgtgccaag cctgcacct ccatgacga ggtatccca gaagagggc
 ctgatgacta gacccgctc tccgtccca ccagccaca tccagtgggg tctcagtcca
 gtctcactat gccgctgtc ccagggtct cctgagcct gcccagctg ggtgttggc
 tgggggcatg ggggagctc tgaagagata cccacagat gtggtccctc cactaggagt
 taactacct acactctgg gccctgcagg agcctggga gggcaagggt cctacggagg
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 agtccagcgc ttcagggtc ggcaggtcct ggggaggtg agactgcaga ggaagccact
 gggctgggag aaggtgctt ggtctctg gtaggcagg gtagtctgt tgtcttagat
 gtggtgtg cagccccagg accaagctta aggagaggag agcatctgt ctgagacgga
 tggagaggaga gagggtgag atgactggc ctgttctgta ggagagactg gccagaggca
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 gctctgagcc cctctctt cctgagctt tccggggagg agcctggagt gtaattacct
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 ctgtaggcc cctgggtg ggtttagcag gctgcagcag gcagagagg agtaccccc
 tgagagcatg tgggggaaag cctgtctgtc ttgcaggtgt ccgggggtct aggtatctg
 gctgggtttt caggggcttt ggaagctctg atgtgaatcc ctcaataccc ctagtatctg
 ggtctggga tctgggggaa gaccaacca tgcctgcca agcctggagc cctgtgtt
 gggggcaagg tgggggagcc tggagccct gttgggagg gcgagggcggg ggaagcctga
 gccctgtgt gggagggcga ggcgggggat cctggagccc ctgtgtcggg gggcgaggga
 ggggaggtgg ccgtcgggtg acctctgaa catgagtgt aactccagga ctgtctcca
 agccctccc tctgttggaa attgggtgt cctgggtcc caaggaggc ccatgtgact
 aataaaaaac tgtgaacct

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26	Adenosine A2a Receptor	NP_000666.2	273	agtgacaaag ctgggatcaa ggataggag ttgtaacaga gcagtgcacg agcatgggcc caggccacag gggagaggtt ggggtctggca ggccactggc atgtctctag tagcgacagag ctaccacagt agaggccttg tctaactgcc ttctctctta aagggaatgt tttttctga gataaataaa aaacgagcca catcgtgttt taagcttgct caaatgaaa aaaaaaaaa aaa	Homo sapiens
27	Adenosine A2b Receptor	NM_000676	274	aaatgacaaag ctgggatcaa ggataggag ttgtaacaga gcagtgcacg agcatgggcc caggccacag gggagaggtt ggggtctggca ggccactggc atgtctctag tagcgacagag ctaccacagt agaggccttg tctaactgcc ttctctctta aagggaatgt tttttctga gataaataaa aaacgagcca catcgtgttt taagcttgct caaatgaaa aaaaaaaaa aaa	Homo sapiens

28	274	Adenosine A2b Receptor	NP_000667.1	MLLETODALY VALELVIAAL SVAGNVLVCA AVGTANTLQT PTNYFEVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLEF LACFVLVLTP SSIFSLLAVA VDRYLAICVP IRYKSLVTGT RARGVIATW VLAFIGILTP FLGWSKDSA TNNCTEPWDG HSRTCLVK CLFENVVPMMS YMYVFNFFGC VLPPLLLIMV IYIKIFLVAC ROLQRTLEMD HSRITLQREI HAAKSLAMIV GIFALCWLPV HAVNCVTILFQ PAQGNKPKW ANMAILLSH ANSVNPIVY AYNRDRFRYT FKHIIIRYLL QOADVKSNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	atctttgctg caaagctgg gtatcggtg tgctcagcaa agcgtcaact cgtgcaagaa A cttagagga atagttctgg ctaaggttag gaggtgcca ccaagtctc tttttgttc ctctgctct cctgttggc tcttatcat gagatcttt tgctaagctg gcagaaagat tgcatagtc atgttccag cctgtctcc acctgacct gcactgtcct ctggtccctg aatgaatgaa ctctgatcc caatcttgc tgcagcttc tctatgccac tcatggctcc tcttctgctc tttccatctt ttgtctgaga ttctgagct ctgtacttc tcttgccca tctcacttcc tgaacaccc ctgaagagg ttgttatct tgatggaact caaaaagcca aaaagctgca ggcagaggcg ttgaggacat ctgtttggg aactaagagc agcagcactt tcagattcag tccatataga gctgtcctac agcattctgg aaacttgagg atgtgcggtg cataaagggg ctggaagtga cccactgtg atgagcctt tctaaggaga agggtttcca agagatcacc ccaccagaaa aggttaggaa tgagcaagt gggaaattta gactgtcact gcacatggac ctctgggaag acgtctggcg agagttaggc ccactggccc tacagaagga tcttctggc tcaactgtcc ctgtggagg tcccttgga aggcaagatg cccaaacaac gcactgctc gtcatggcc aatgttacct acatcaccat ggaaatttct attgactct ggccatagt gggcaacgtg ctgtcatct gcgtgtgcaa gctgaacccc agcctgcaga ccaccactt ctatttcatt gtctcttag cctggctga cattgtgtt ggggtgtggtg tcatgcttt ggccattgt gtccgctgg gcatacaat ccacttctac agctgcttt ttatgacttg cctactgctt atcttacc cgcctccat catgtccttg ctggccatcg ctgtggaccg atactggcg gtaagctta ccgtcagata caagagggtc accactcaca gaagaatatg gctggccctg ggcctttgct ggctgtgtc attctgtgtg ggattgacc ccatgtttgg ctggaacatg aaactgacct cagagtacca cagaaatgtc accttcttt catgccaatt tgtttccgtc atgagaatgg actacatggt atactcagc tctctcact ggattttcat cccctgggt gtcatgtgg ccatctatct tgacatcttt tacatcatic ggaacaaact cagtctgaac ttatctaact ccaagagagc aggtgcattt tatggacggg agttcaagac ggctaagtc ttgttcttg ttttttctt gttgtctgt tcatggctgc ctttatctat catcaactgc atcatctact ttaatgttga ggtaccacag ctgtgtgtgt acatgggcat cctgtgtcc catgccaact ccatgatgaa ccatctgtc tatgctata aaataaagaa gtccaaggaa acctacttt tgatctcaa agcctgtgtg gctgcccac cctctgattc ttgggacaca agcatgtaga agaattctga gtagttatcc atcagagatg actctgtctc attgaccttc agattcccca tcaacaaca cttgagggcc tgtatgctg ggccaaggga tttttacatc ctgtattact tccactgagg tgggagcacc tccagtgtc cccaattata tctccccac tccactactc tcttctcca ctctatttt ctttgtctc ttctctctaa ttcaagtgtt tggaggcctg acttggggac aacgtattat tgatattat gtctgttttc ctcttccca atagaagaat agtcaatgga gctgaagggt gcttagttg acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgac tcaattccat	Homo sapiens

30	275	Adenosine A3 NP_000668.1 Receptor	gccaattgtgg aattgagcag agaacctgct ctgaggagat gctagaaga tgttgggaac agaagaata aactgagttt aagggggact taaactgctg aattcacctg tggatatttt tgagtaata aaagctaata g VGVLMPLAI VVSLGITIHF YSCLFMTCLL LIFTHASIMS LLAIVDRYL RVKLTVPYKR VTTHRIWLA LGICLWVSEL VGLTPMFGWN MKLTSEYHRN VTFLSQFVS VMMDVMVYF SFLTWIEPL VVMCAIYLDI FYIRNKLSL NLSNKETGA FYGREFTAK SLFLVLELFA LSWLPLSLIN CIIYFNGEVP QLVLYMGILL SHANSMNPI VYAYKIKKEK ETYLLIKAC VVCHPSDSL DTSIEKNS	Homo sapiens
31	309	Melanocortin NM_000529 2 Receptor (adrenocorti cotropic hormone) (MC2R)	atgaagcaca ttataaactc gtatgaaac atcaacaaca cagcaagaaa taattccgac A tgtctcctg tggttttggc ggaggagata ttttcacaa ttccattgt tggagttttg gagaatctga tgcgtcctgt ggtgtgttc agaataaga atctccaggc accaatgtac tttttcactc gtgcttgcc ccatctgat atgtcgggca gcctatataa gatcttgaa aatatcctga tcatattgag aaacatggc tatctcaagc cacgtggcag ttttgaacac acagccgatg acatcataga ctccctgttt gtctctccc tgcctggctc catcttcagc ctgtctgtga ttgctcgga cgcctacac accatcttc acgcactgcg gtaccacagc atcgtgacca tgcgcggcac tgggtgtgtg cttacgggtca tctggacgtt ctgcacggg actggatcca ccatgtgtgat cttctcccat catgtgccca cagtgtacac cttcacgtcg ctgttcccg tgatgtgtgt cttcatctgt tgcctctatg tgcacatgtt cctgctggct cgatccca caggaagat ctccaccctc cccagagcca acatgaaagg ggcacatca ctgaccatcc tgcgcgggt cttcatcttc tgcctggccc cctttgtgt tcatgtctc ttgatgacat tctgcccagg taaccctac tgcgctgtct acatgtctct cttccaggtg aacggcatgt tgcacatgtg caatgcctc attgacccct tcatatatgc cttccggagc ccagagctca gggacgcatt caaaagatg atctcttgc gacggctactg gtag FFICSLAISD MUGSLYKILE NIIILRNMG YLKPRGSFET TADDIISLF VLSLLGSIFS LSVIAADRYI TIFHALRYHS IVTMRRTVV LTVIWFCTG TGITWIFSH HVPTVITFS LFPLMLVFIL CLYVHMFLLA RSHTRKISTL PRANKGAIT LTILGVFIF CWAPFVLHL LMTFCPSNPY CACYMSLFQV NGMLIMCNV IDPFIYAFRS PELRDAFKKM IFCSRYW	Homo sapiens
33	376	Alpha 1d- adrenoceptor	tcctgcggc cgtcgttct gtgcccccg cccggccacc gacggccg cgttgagatg A acttcccg atctcctgag cgtcagttc gaggacccc gccggacag cagcgcagg ggctccagc cggcgccggg cgggggcagc gggcgccgc cggccccctc ggaggcccg cggtggcg cgtgcggg ggcgcggg ggcgcggg cgtggtggg cgcaggcagc ggcaggaca accggagctc cgcggggggg cgggggagc cggcgccggg cggcagcgtg aatggcac cggccgtcgg ggcactgtg gtgagcgcgc agggcgtgg cgtggcgctc ttctggcag cttcatcct tatggccgtg gcagtaaac tgcctgtcat cctctcagtg gcctgaacc gccacctga gacgtcac aactattca tctgaacct ggcctggcc gacctgtgc tgcgcggcac cgtactgcc ttctcggcca ccatggaggt tctgggcttc tgggctttg gcgcgcct ctcgcagcta tggcgccgc tggacgtgct gtgctgcacg gcctccatcc tgcgcctctg caccatctc gtggaccggt acgtggcgct gcgccactca	Homo sapiens

34	Alpha 1b- adrenoceptor	NP_000669.1	376	agcccaagc atggccagg aggcctgccc gtcgtagccc tgggtggtgc cgtaggcccc gacagcgct tctgcggtat caccaggag tcctttacc tgcctatggc ggtcatgtg cgacgacca cgcgcagcct agagcgagc gtggtgctgc gcatccactg tgcgcgcg cgacgacca agggccacac ctcccgagc cgtgagaaga aagcgccaa gactctggc ttccctttct tctttgtct gcgctcggc ggcgtttca aggtcatctt ctggctcggc taccctgtt ccagccgga gttcaagcg cgtctcgcc ggcgcgcgcg cctctctgg accagcgcc tgcgccaaga ctgcgcccc ctggccctca ccgcgctcc cgaacccgac gtcccggtc ccagcgtcg aaagccacc ccgttcgga gacccacac ccagctcgc cgcgccggg ggcgcagcg cgcagagga gtgtccctag ggtcccca caggttgcc gccgactaca gcaacctag ggagaccga tgtctgggc ttgggggttaa aggggaccag tgcaaatcgg agaccggaa actgatcag gggcagagct tgaggctga gccctgaaa tcagggtccc agaactctt tctagaagg ctcccaatcc ctatttga aacactgcc agcccaagc atggccagg aggcctgccc SGEDNRSSAG EPSSAGAGD VNGTA VACNRHLQTV TNYFIVNLAV ADLLSAT TASILSLCTI SVDRYGVGRH SLKYP PDERFCGITE EAGYAVFSV CSFYLPMA EVVIRIHCGR AATGADGAHG MRSAGHT WPFPPFFVLP GLFPQLKPS EGVKVI CRRRRRRRPL WRVYGHWRP STSGLRQ QAPVASRRKP PSAPREWRLL GPFRRPT AVSLGVPHFV AEGATCQAYE LADYSN agggcaggaga cgtgctgccc gctgggctgc cctctgggaa gaagaccag ggggaagcaa cagcccttcc gagcccaatc atccccagg gacctggaca ccggccacaa cacatcaga aacttcatg gccccaacca gacctcagc agggccatct ctgtgggctt ggtgctggc	377	Alpha 1b- adrenoceptor	NM_000679	377	agcccaagc atggccagg aggcctgccc gtcgtagccc tgggtggtgc cgtaggcccc gacagcgct tctgcggtat caccaggag tcctttacc tgcctatggc ggtcatgtg cgacgacca cgcgcagcct agagcgagc gtggtgctgc gcatccactg tgcgcgcg cgacgacca agggccacac ctcccgagc cgtgagaaga aagcgccaa gactctggc ttccctttct tctttgtct gcgctcggc ggcgtttca aggtcatctt ctggctcggc taccctgtt ccagccgga gttcaagcg cgtctcgcc ggcgcgcgcg cctctctgg accagcgcc tgcgccaaga ctgcgcccc ctggccctca ccgcgctcc cgaacccgac gtcccggtc ccagcgtcg aaagccacc ccgttcgga gacccacac ccagctcgc cgcgccggg ggcgcagcg cgcagagga gtgtccctag ggtcccca caggttgcc gccgactaca gcaacctag ggagaccga tgtctgggc ttgggggttaa aggggaccag tgcaaatcgg agaccggaa actgatcag gggcagagct tgaggctga gccctgaaa tcagggtccc agaactctt tctagaagg ctcccaatcc ctatttga aacactgcc agcccaagc atggccagg aggcctgccc SAGGAAPSEG PAVGGVPGGA GGGGVV VSAQGVGVG VFLAATILMA VAGNLLV PFSATMEVLG FWAEGRAFCD VWAADV VMYCRVYV ARSTTRSLA GVKRERGR SSLSVRLKF SREKKAATL AIUVGVFV GYENSCVNL IYPCSSREFK RAFRLRL PSSGDAPPGA PLALITLDP DPEPPGT RAKVSLSHK IRAGGAQRAE AACQSRSE LADYSNLRET DI cctgggctgc gactcctgc caggaggcg cagctgagga cagctgagga gcttcg ctatggagg cggactctaa gatgaat cctgcccact ggggagagt gaaaaat aactccacac tgcccagct ggacatcc gccttccatc tcttggccat cgtggg	378	Alpha 1b- adrenoceptor	NM_000679	378	agcccaagc atggccagg aggcctgccc gtcgtagccc tgggtggtgc cgtaggcccc gacagcgct tctgcggtat caccaggag tcctttacc tgcctatggc ggtcatgtg cgacgacca cgcgcagcct agagcgagc gtggtgctgc gcatccactg tgcgcgcg cgacgacca agggccacac ctcccgagc cgtgagaaga aagcgccaa gactctggc ttccctttct tctttgtct gcgctcggc ggcgtttca aggtcatctt ctggctcggc taccctgtt ccagccgga gttcaagcg cgtctcgcc ggcgcgcgcg cctctctgg accagcgcc tgcgccaaga ctgcgcccc ctggccctca ccgcgctcc cgaacccgac gtcccggtc ccagcgtcg aaagccacc ccgttcgga gacccacac ccagctcgc cgcgccggg ggcgcagcg cgcagagga gtgtccctag ggtcccca caggttgcc gccgactaca gcaacctag ggagaccga tgtctgggc ttgggggttaa aggggaccag tgcaaatcgg agaccggaa actgatcag gggcagagct tgaggctga gccctgaaa tcagggtccc agaactctt tctagaagg ctcccaatcc ctatttga aacactgcc agcccaagc atggccagg aggcctgccc SAGGAAPSEG PAVGGVPGGA GGGGVV VSAQGVGVG VFLAATILMA VAGNLLV PFSATMEVLG FWAEGRAFCD VWAADV VMYCRVYV ARSTTRSLA GVKRERGR SSLSVRLKF SREKKAATL AIUVGVFV GYENSCVNL IYPCSSREFK RAFRLRL PSSGDAPPGA PLALITLDP DPEPPGT RAKVSLSHK IRAGGAQRAE AACQSRSE LADYSNLRET DI cctgggctgc gactcctgc caggaggcg cagctgagga cagctgagga gcttcg ctatggagg cggactctaa gatgaat cctgcccact ggggagagt gaaaaat aactccacac tgcccagct ggacatcc gccttccatc tcttggccat cgtggg	379	Alpha 1b- adrenoceptor	NM_000679	379	agcccaagc atggccagg aggcctgccc gtcgtagccc tgggtggtgc cgtaggcccc gacagcgct tctgcggtat caccaggag tcctttacc tgcctatggc ggtcatgtg cgacgacca cgcgcagcct agagcgagc gtggtgctgc gcatccactg tgcgcgcg cgacgacca agggccacac ctcccgagc cgtgagaaga aagcgccaa gactctggc ttccctttct tctttgtct gcgctcggc ggcgtttca aggtcatctt ctggctcggc taccctgtt ccagccgga gttcaagcg cgtctcgcc ggcgcgcgcg cctctctgg accagcgcc tgcgccaaga ctgcgcccc ctggccctca ccgcgctcc cgaacccgac gtcccggtc ccagcgtcg aaagccacc ccgttcgga gacccacac ccagctcgc cgcgccggg ggcgcagcg cgcagagga gtgtccctag ggtcccca caggttgcc gccgactaca gcaacctag ggagaccga tgtctgggc ttgggggttaa aggggaccag tgcaaatcgg agaccggaa actgatcag gggcagagct tgaggctga gccctgaaa tcagggtccc agaactctt tctagaagg ctcccaatcc ctatttga aacactgcc agcccaagc atggccagg aggcctgccc SAGGAAPSEG PAVGGVPGGA GGGGVV VSAQGVGVG VFLAATILMA VAGNLLV PFSATMEVLG FWAEGRAFCD VWAADV VMYCRVYV ARSTTRSLA GVKRERGR SSLSVRLKF SREKKAATL AIUVGVFV GYENSCVNL IYPCSSREFK RAFRLRL PSSGDAPPGA PLALITLDP DPEPPGT RAKVSLSHK IRAGGAQRAE AACQSRSE LADYSNLRET DI cctgggctgc gactcctgc caggaggcg cagctgagga cagctgagga gcttcg ctatggagg cggactctaa gatgaat cctgcccact ggggagagt gaaaaat aactccacac tgcccagct ggacatcc gccttccatc tcttggccat 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PSSGDAPPGA PLALITLDP DPEPPGT RAKVSLSHK IRAGGAQRAE AACQSRSE LADYSNLRET DI cctgggctgc gactcctgc caggaggcg cagctgagga cagctgagga gcttcg ctatggagg cggactctaa gatgaat cctgcccact ggggagagt gaaaaat aactccacac tgcccagct ggacatcc gccttccatc tcttggccat cgtggg
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Homo
sapiensHomo
sapiens

36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtca tcttgtctgt ggcctgcaac cggcactgac ggcacgccac caactacttc attgtcaacc tggccatggc cgaactgctg ttgagcttca ccgctcctgc cttctcagcg gcccagaggg tgcctggcta ctggtgctg gggcgatct tctgtgacat ctgggcagcg gtggatgccc tggctgcaac agcgtccatt ctgagcctgt gcgccatctc catcgatggc tacatcgggg tggcctactc tctgcagtat ccacgctgt tcacccggag gaaggccatc ttggcctgc tcaagtctg ggtctgttc accgtcatct coactgggcc tctcctggg tggaaaggagc cggcaccgaa cgaatgacaag gagtggggg tcaccgaaga accctctat gacctctct cctctctggg cctctctac atccctctg cggctcatct agtcatgtac tgccgtgtct atatagtggc caagagaacc accaagaacc tagaggcagg agtcatgaag gagatgtcca gtaccaagga gctgacctg aggtccatt ccaagaactt tcacgaggac acctttagca gtaccaaggc caaggccac aaccaggga gtccatagc tgtcaaaact tttaagttct ccagggaataa gaagcagct aagacgttg gcatgtggt cgtatgttc atctgtgct ggcctacctt ctccatgct ctaccgttg gctcctgtt cttccacctg aagcccccg acgctgtgt caagtgtgt tctggttg gctacttcaa cagctgcctc aaccctatca tctacctg ctcagcaag gattcaagc ggccttcgt ggcacctc gggtgcaggt gcgcggcg cggcgccgc cgaagccgc gccgcctgc cctggggcg tgccctaca cctaccggc gtggacgac ggcggtcgc tggagcgtc gcagtggcg aggactgc tggagacag cggcagctgc ctgagggca gccagcgac cctgccctg gctcgccga gccgggcta cctggcgcc cggcgccctc ctgagcctg cggcgctga ttcccgaggt gaaggcgcc cggcgccctc ttcacttca agtctctgac cgaagccgag cggcgcgcc gccacgact gggccgctc cgaagcaac ggagctgag aggcggcgcc agccccgga cgaagcgcg cgcagcaac aagcaacatg cccctggcg cgggcaagt aacgggcagc cgggcttcaa aagcaacatg cccctggcg cgggcaagt ttaggcccc cgtgcgagc tttcttccc tgggagga aacatgctg ggggga</p>	Homo sapiens
37	Alpha 1c- adrenoceptor	NM_000680	<p>WAAVDVLCCT ASIISLCAIS IDRYIGVRS LQYPTIVTR KAILALLSW VLSVISIGP LLGWKEPAPN DKCEGVTEE PFYALFSSLG SFYIPLAVIL VMYCRVYIVA KRTTNLEAG VMKEMSNSKE LTLRIHKNF HEDTISSTKA KGNPSSIA VKLFKFSREK KAAKTLGIW GMFILCWLPF FIALPLGSLF STLKPPDAVF KVFVWLGYN SCLNPIIYPC SKEFKRAFV RILGCQCRGR GRRRRRRRR LGCAYTYRP WTRGGSLETS QSRKDSLDDS GSCLSGSQRT LPSASPSGY LGRGAPPVE LCAFEWKAP GALLSLPAPE PPGRRGRHDS GLFTFKLLT EPESPCTDGG ASNGGCEAAA DVANGQPFK SNMPLAPQF gaattccgaa tcaatgtcgag aatgctgaat cttccccag ccaggacgaa taagacagcg A cggaaaagca gattctcgta attctggaat tgcattgtc aaggagtctc ctggatcttc gcacccagct tgggttaggg agggagtcg ggtccgggc taggcagcc cggcaggtgg agaggggtccc cggcagcccc gcgcgccct ggcctgctc ttaatgccct gcccttcat gtggccttct gagggttccc agggctggc cctccagcc gagaccttt gattccggc caccctcagc caaacccacc tggcagggct cctccagcc gacaccttt gattccggc tcccgcgctc cgcctccgc gccagcccg gaggtggccc tggacagccg gacctggccc ggccccggtt gggaccatgg tgtttctc tccgacagct ccaactgcac</p>	Homo sapiens

38	Alpha 1c- adrenoceptor	NP_000671.1	<p> cgaaccgcg gaaccgggtga acatttccaa ggcattctg ctccgggtga tcttgggggg ctcattctt ttccgggggtgc tgggtaacat cctagtgatc ctctccgtag cctgtcacgc acactgcac tcaagtaacgc actactacat cgtcaacctg cgggtggccg acctcctgct cacctccagc gtgctgacct tctccgccat ctccaggtc gtaggtact ggccttccg cagggtcttc tgaacatct gggcggcagt gtagtgctg tgcgtcacgc cgtccatcat gggctctgc atcatctcca tgcaccgcta catcgctg agtaccgc tgcgtaccc aacatagtc accagagga gggctctcat ggcctgctc tgcgttggg cactctccct ggctcatatc attggacccc tgttcggctg gaggcagccg gcccgcagg agagaccat ctgcagatc aacgaggagc cgggctacgt gctcttctca ggcctgggt cctctacct gccttgccc atcatcctgg tcatgtactg ccgctctac tgggtggcca agagggagag cggggcctc aagtctggc tcaagaccga caagtggag tggagcaag tgcgtctccg catccatcgg aaaaacgcc cggcaggagg cagcgggatg gccagcgcca agaccaagac gcacttctca gtgaggctcc tcaagtctc ccgggagaag aaagcgcca aacgctggg catcgtggtc ggcctcttcg tctctgctg gctgcttctt ttcttagtca tgcctattg gtctttctc cctgatttca agcctctga aacagttttt aaaatagtat ttggtctgg atatctaacc agctgcatca acccatcat ataccatgc tccagccaag agttcaaaa ggcctttcag aatgtcttga gaatccagt tctccgaga aagcagctctt ccaaacatgc cctgggtac accctgacc cggcagcca ggcctggaa gggcaacaca aggacatggt gcgcatccc gtggatcaa gagagacctt ctacagatc tccaagacgc atggcgtttg tgaatggaaa ttttctctt ccatgccccg tggatctgcc aggtattacag tgcctaaaga ccaatctcc tgaaccacag ccgggtgag aagtaaaagc ttttggagg tctgctgctg tgtagggcc tcaacccca gcttgacaa gaacatcaa gttccaaaca ttaaggctca caccatctcc ctcaagtga acggggagg agtctaggac aggaagatg cagaggaaaag gggaataatc ttaggtacc acccacttc ctctcgaa ggcagctctt tcttgaggga caagacagga ccaatcaag agggacctg ctgggaatgg ggtgggtggt agaccaact catcaggcag cgggtaggc acaggaaga gggagggtgt ctcacaaca accagtccag aatgatacgg aacagcatct ccctgcagct aatgcttct tggctactct gtgcccactt caacgaaac caccatgga aacagaattt catgcacaat ccaaaagact ataaatatag gattatgatt tcatcatgaa tatttgagc acactcta agttggagc tattcttga tggagtgag gggattttat ttccaggctc accctactga cagccacatt tgacatttat gccggaattc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681	<p> MVFLSGNASD SSNCTQPPAP VNISKAILLG VILGLILFG VLGNILVILS VACHRHLSV P THYIYNLAV ADLLTSTVL PFSALFEVLG YWAFGRVFCN IWAADVLLCC TASIMGLQII SIDRYIGVSY PLRYPTIVTQ RRLMALLCV WALSVISIG PLFGWRQAP EDETICQINE EPGYVLFSAI GSFYPLAI I LMVCRVYV AKRESRLGS GLKTDKSDSE QVTIRIHRKN APAGSGMAS AKTNHFSVR LLKFSREKKA AKTLGIVVGC FVLCWLPFFL VMPIGSFFPD FKPSETVEKI VFVWGLYNLC INPIIYPCSS QEFKAFQNV LRIQCLRRQ SSXHALGYTL HPPSQAVEGQ HKDMVRIPVG SRETFYRISK TDGVCEWKEFF SSMRPGSARI TVSKDQSSCT TARVRSKSF L EVCCVGPST PSLDKNHQVP TIKVHTISLS ENGEEV gcgctcggcg cccaccaggc ggagcccg gagaaacct gctccgtcg cggctcctgg A agagctgac gtccacctgc cccggcccg ctaggacgg ggtgacctc atcgggcccc </p>	Homo sapiens

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40	Alpha 2a- adrenoceptor	AAA51664.1	<p> gctcacaaaa ggtaaatgga tgggggttac ctageccctgg ctaattcccc ttccattccc aactctctct ctcttttga agaaaaatgc taaggcagc cctgcctgccc cccccatcc cccgctgtaa atatacacta tttttgatag cacacatggg gccccatat ctcttgccct tgggtttgat gttgaaatcc tggccttggg agagatgctc tccaggcaga cacagctgtc tgggttcaggc caagccctct tgcattgcaa gccctttctg gtgttatgaa gtccctctat gtcgtgcttt tcaccagcaa cttgtgactg tcccttgac acggacctgc tttgagattt cctgacaggg aaagatttc tgtccatttt tttctgtgc ctaacagcat aattgccttt tcctatgtaa atattatgat ggtggatcaa gacataagta aatgagcctt totgcctcac atcagccctg tgtataaagc cattattctc tgatgactg tttgccccag taactcactt taaacctctc ctttccagt tccctctct cctccaggg ccaactgctt aagaagata tgtatgttc tatcttat gctgtgtgc cctcctgccc cgaagtgc tgactatggg gaaatcttt agctgctgt tttagactcc agggagtga aattatggtg aagaagcaaa cctgatacaa tttgcccag gtaaacagtt tgaagagaca aatgggctg ccaaacgtga cagttcttc ccaagagct gttaggtatc aaatgttgt ccttcccc cctcgtgctt ttctggtga gatcatgca ttgatgaact gccaaagtca ggggaggagg gcagagactt tgtgtttaca tctgcattc tacatgttt agacagagac aatttaaggc ctgcactctt attcactaa agaaaaacta atgtcagcac atgtgtctaa tgacagtga ttttttta aataaaaaa tttacagatc aatgtgaaa taatatgaa tggagtgtc aaa MGSIQPDAGN ASWNGTEAP GGAATPYSL QVTLIVCLIA GLMLITVFG NVLIIAVFT P SRALKAPQNL FIVSLASADI LVATIVIPFS LANVNGWY FGKTWCEIYL ALDVLFCFSS IVHLCAISLD RWSITQAE YNLKRTPRRI KALITCWVI SAVISEPPLI SIEKGGGG PPAPRCEI NDQWVVIS CIGFFAPCL IMILVVRIV QIAKRTRVP PSRRGPDVA APPGGTERRP NGLGPERSAG PGGAEEPLP TQNGAPGE APAGPRDTDA LDLEESSSD HAERPPGPRR PERGPRGKG ARASQVKPGD SLRGAGRGR GSRRLQGRG RSASGLPRR AGAGQONLEK RFTFLAVI GVVFVWFPE FTYTITAVG CVPRTLEKF FWFYGCNNS LNPVIYTFN HFRRAFKKI LCRGDRKRV atggacacc aggaccccta ctcctgtcag gccacagcgg ccatagcggc ggccatcacc A ttctcattc tctttaccat cttgggcaac gctctggtca tcttggtgt gttagaccgc cgctcgtgc gggccctca gaactgttc ctggtgtcgc tggcgcgcgc gcacatcctg gtggccacgc tcatcacc tttctcgtg gccacagagc tcttggtgta ctggtacttc cgccgcactg ggtgcgaggt gtactgtgc cctggaccgc tactggcgg tgagcgcgc gctggagtac gtcacctgt ggcctcag cctggaccgc cctgcatcaag tgcataccc tcaactgtgt gctcagcc aactcaagc gaaccggcg ccctatctac agggcgacc agggccccca gccgcgggg gccgtcatct cgtgcgcgc cctcatctac agggcgacc agggccccca gccgcgggg cgccccagt gcaagctcaa ccaggaggcc tggatcatcc tggcctccag catcggtact ttctttgtc cttgcctcat catatcctt gtctactgc gcactacat gatcgccaaa cgagcaacc gaagaggtcc cagggccaag gggggcctg ggcaggtga gtccaagcag ccccgaccg accatggtg gctttggc tcagccaaac tgcagcctt ggcctctgtg gcttctgcca gagaggtcaa cgggacactg aagtcactg gggagagga ggaaggagg accctgaag atactggac cggggcctg ccaccagtt gggctgcct tcccaactca ggccaggcc agaaggaggg tgtttgtgg gcattccag aggatgaag tgaagaggag </p>	Homo sapiens
41	Alpha 2b- adrenoceptor	NM_000682	<p> atggacacc aggaccccta ctcctgtcag gccacagcgg ccatagcggc ggccatcacc A ttctcattc tctttaccat cttgggcaac gctctggtca tcttggtgt gttagaccgc cgctcgtgc gggccctca gaactgttc ctggtgtcgc tggcgcgcgc gcacatcctg gtggccacgc tcatcacc tttctcgtg gccacagagc tcttggtgta ctggtacttc cgccgcactg ggtgcgaggt gtactgtgc cctggaccgc tactggcgg tgagcgcgc gctggagtac gtcacctgt ggcctcag cctggaccgc cctgcatcaag tgcataccc tcaactgtgt gctcagcc aactcaagc gaaccggcg ccctatctac agggcgacc agggccccca gccgcgggg gccgtcatct cgtgcgcgc cctcatctac agggcgacc agggccccca gccgcgggg cgccccagt gcaagctcaa ccaggaggcc tggatcatcc tggcctccag catcggtact ttctttgtc cttgcctcat catatcctt gtctactgc gcactacat gatcgccaaa cgagcaacc gaagaggtcc cagggccaag gggggcctg ggcaggtga gtccaagcag ccccgaccg accatggtg gctttggc tcagccaaac tgcagcctt ggcctctgtg gcttctgcca gagaggtcaa cgggacactg aagtcactg gggagagga ggaaggagg accctgaag atactggac cggggcctg ccaccagtt gggctgcct tcccaactca ggccaggcc agaaggaggg tgtttgtgg gcattccag aggatgaag tgaagaggag </p>	Homo sapiens

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 caatgctgat gggctgtgc attgaggacc cctgttctt ggttctcagt cccaccacaa
 aacctggcac ccagaacagt tggagtggtg gaaaggaggt ttatcgctt tcccttgag
 agggcctggc ttcaacattg ggcagtagg catcttagct tggcaggtgt cgggggaatg
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 gtgggtgtt gaggccagag tatgcccctg ggtgtggtg gggagctggg ccaggagagg
 gactgactgt gacctctgc tggcgggtct tgtgtgcgc ccatgggacc ccagtgctc
 ttgcctgtga cctctattg cgacatgcag gtggtgttt tttttttt taaactctga
 gctattttat caataaagg tatattgtaa taag

43 . 389 Alpha 2c- NM_000683
adrenoceptor

Homo
sapiensHomo
sapiens

gctgtgtgca tgggcgtgtt cgtgctctgc tggttccctt tcttctcat ctacagcctg
 tacggcatct gccgcaggc ctgccaggtg cccggcccg ctttcaagt tcttcttgg
 atcggtact gcaacagctc ctcaacccg gtcactaca cggcttcaa ccaggatttc
 cggccatct tcaagcacat cctcttcca cggaggaga gggcttcag gcagtgactc
 gcaccgtct gggaatctg gacagctcc cgtcggggc tgggcagaag gggcgggccg
 gaagcggggg agctttcca gagaccggg gagcttccc agagaccgg ggtggattg
 gctccaggg gcaggggag ggtgcggcag gccagagct tggcagag atagccggc
 tccaggagt ggggaggaga gaggggaga ccccttgcc ttcccctc agcaagggc
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 gtcggggggt ggtgcccagg ggcaaggag aagcaccga caatcttga ttactgaag
 tatttaaatg ttggccaaa acaacagcca actatttct aaataaacct
 ttgtaa

44 389 Alpha 2c- NP_000674.1 MASPALAAAL AVAAAGPNA SGAGRGSGG VANAGASWG PPRGOYSAGA VAGLAAVVG P
 adrenoceptor

LIVFTVGNV LVIAVLSR ALRAPQNLFL VSLASADILV ATLMFPSLA NELMAYWFG
 QWCGVYAL DVLFCTSSIV HLCALSLDRY VSVTQAVEIN LKTRPRVKA TIVAVWLISA
 VISEPPIVSL YRQPDGAAYP QCGLNDETWY ILSSIGSFF APCLIMGLIV ARIYRVAKRR
 TRTLEKRAP VQPDGASPT ENGLNAAAGE ARTGVARPRP PTWSRTRAAQ RPRGGAPRL
 RRGRRRAGA EGGAGGADQ GAGPAAQSG ALTASRSPG GRLSRASSR SVEFFLSRRR
 RARSSVCRK VAQAREKFT FVLAVMGVF VLVWPFPEFI YSLYGICREA QVPGPLEKF
 FFWIGYCNSS LNPVIYTVFN QDFRSEKHI LERRRRGER Q

45 599 Bradykinin NM_000710
 B1 Receptor

ctgtgeatgg catcatctg gccctctta gagctccaat cctccaacca gagccagctc A
 ttccctaaa atgctacggc ctgtgacaaat gctcagaag cctggacct gctgcacaga
 gtgctgccga catttatcat ctccatctgt tcttcggcc tcttaggaa ccttttctc
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 ctggcagct ctgactgtgt gttgtcttg ggttgccct cctggcctg tcatcaacg ggtcatcaag
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 gtgctcatct ggttggtgg gggcctcttg agcatccca cattctgct gcatccatc
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 caagcagtc gaggtgctt ttggaggac ttcatgacc tgggctgca attggccaac
 ttctttgct tcaataacag ctccctgaat ccagtaattt atgtcttgt gggcggctc
 ttcaggacca aggtctggga actttataa caatcaccc ctaaaagtct tgctccata
 tcttcatccc ataggaaaga aatcttccaa ctttctggtc ggaattaaaa cagcatgaa
 cc

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPLLEL QSSNQSLFP QNATACDNAP EAWDLHRVL PTFIISICFF GLIGNLEVL P VFLPRRLN VAEIYLANIA ASDLVFLGL PFWAENIWNQ FNPFGALLC RVINGVIKAN LFISIFLVA ISQDRYRVIV HPNASGRQQR RQARVTCVL INVUGLLSI PTFLLRSIQ VPDINITACI LLLPHEAHWF ARIVELNIG FLPLAAIVF ENYHILASIR TREEVSTRV RGPKDSKTTA LILTLVAFV VCWAPYHFFA FLEFLFQVQA VRGCFWEDFI DLGLQLANFF AFTNSSLNVP IYFVGRLEF TKWELYKQC TPKSLAPIS SHRKEIFQLF WRN	Homo sapiens
47	600	Bradykinin B2 Receptor	NM_000623	atgttctctc ctggaagat atcaatgttt ctgtgtgttc gtgagactc cgtgccacc A acggctcttt tcagcgcga catgtcctaat gtcacttgc aaggccacc tcttaacggg acctttgcc agagcaaatg cccccaagt ggtgtgtgt gccacctag agaactctt tgtcctcagc cccccttc tctgggtgt gttcgtgtg cgcacctag tctacttgc ccttcttgc cctcaaac gtcttctgcc tgcacaagag cagctgcag gtggcagaga tctacttgc gaaactggcc gcagcagacc tgatcctggc ctggtgtgt gacgtctgc cgtgtgtgt atgcattat cctcatgaac ttcgactggc tctttggga gacgtctgc cgtgtgtgt gtgagctgc accgtacct ggccctgtg ctgtacagca gcatctgttt cctgactgt gtgagctgc cgaacttgc cgaacttgc cagcttggg aaaaactgt ccatgggccc gatggcggc cctgactgc cctgactgc tttccggac catgaaggag atctgggggt gtacgtgtc cctgactgc cctgactgc tgtgtcatca gctaccatc cctcatctgg tacagcgtg agggccaca cgtcaccgt cgtgactgc gtgtgttc tgtgtgttc gactgtcatc gaagtgttca ccaactgtc cctgaatgt cgtgtgttc tgtgtgttc gactgtcatc accttctgca cgtgtcagat catgcagggt cgtgcagaa cgtgcagaa gaaactcaag gagatccaga cgtgagagg ggcacagggt cgtgtgttc tgtgtgttc gactgtcatc atctgtgtgc tgccttcca gatcagacc tctgtgttc cgtgtgttc cgtgtgttc cgtgtgttc ctctcagct gccaggaga ggcactatc gatgaatca cacagatgc ccttctcatc gcctacagca acagtgtc caaccactg gtgtactga tctgtgttc cgtgtgttc gactgtcatc aagaagtctt gggagggtga ccaggagggt tgcagaaag ggggtgtcag gtcagaacc atcagatgg agaactccat gggcacactg cgtgtgttc tctgtgttc acgtgtgttc cacaactgc aggtgtggc gacagtgtc tttcagcat ggcacaggaa tgcgaaggag aatttgtga aggtgtggc gacagtgtc gatgtgttc gatgtgttc gtaaacacc ggagactaat acatctatgc acgactgtg gaaatgtgt ggtgtgttc ggtgtgttc ctcacgcaca tctgtcctg ccaattttg caggagcat ggtgtgttc ggtgtgttc ctcacgcaca gccaaggact ccaaatcaac aacagcata ctgtgttc tttgtgttc accgtgttc gctgtctc tccaggagt gaggaggcc tggggggag gaggagggt actgagctc cctccctgt tttctcgtc cctgtcccg caagacaact tagatctcca ggagaactgc catccagctt tgggtgcatg gctgtgttc caagtgttc gttgtgttc gttctttaa tctattcag tagaactttg agagacaatt tctgtgttc ataaagtt agcctgtgag ggtcctgtat acaactgtg agaccagat tttatgttc cctcactga tggacaagga ggtctgttc aagaagaat ccaataagca catatgagc actgtgttc tatgagtat tgagcactgt aggaagacc caagaagag agggagctt cctcactga aggaactca aagactcaag tgggaacgac tgggcactgc caccacaga aagctgttc agagacggt cgagcagggt gctgtgtgt atattgacag cagaagggg agaccaaggt tccagctcaa ccaataacta ttgcacaacc acctgtcct gcctcagtc cttttatgt aacatgaag cgttgtgagg gttaaaggca gtaacaggta taaagtactt agaaagcaa aggtgtctac	Homo sapiens

48	600	Bradykinin B2 Receptor	NP_000614.1	<p> gtaaatgtga ggcatacatta cgcagacgta actgggatat gttactata agaaaaagac actgaggtct agaaatagct ccgtggagca gaatacgtat tgggagcccg tggcggtgtg aagcaccagt gctgggcaca cagtaggtgc tcatggctc cctccacct gtcattccca ccacctgag gcccaaccg ccacacac aggaacattt ggagagaag coactgtcttc aaagtctgat ttgtgatgag gcagaggaag atattctaa tcggtcttgc ccagagatc acagtgtga gacccccac caccagcccg tacctgggaa ggggagagt gcaggcctgc tcaggactg tctctgtctc agcaaccaag gcatgttcc tgcatacaa tggttattg gaagtgccc cagtatgag cctagaagag tgtgaaagg aatggcaatg gtgttccca tcggcagtgc cagggcagca ctcattcact tgataaatga atatttatta gctggttga gagctagaac ctggagagct agaactgga gaactagaac ctggagggct agaactgga gagctagaa ccaagaaggg ctagaacctg gagggctag aacctagaga agctaaacc tgagctagaa gctggagagc tagaacctgg agggctgga tctgaagggc tagaacctgg agggctgaa tctggagagc tagaacctgg agggctagaa cctggagggc tagaacctgg agggctaga acctggagg ctggaatctg gagagctaga acctggagg ctgaacctg gagggctaga acctagaagg gctagaacct ggagggctag aacctggcag gtagaacct agaaggcta gaacctggag agccagaacc tggagggcta gaacctgga gggctagaac ctgtagact agaactgga gagctagaac ccggcaggct agaactggc aagctagaac ctggaggaa tgaactgga gggctagaac ctggagaatg agaaaattt acatggcaaa gagccataa atcttgaca atcaactct gaattttaa gcaaaagct gaaaaaaag attcctctt tcccccaac cactctttt tccccacc ccaactctct ctgctcagt agtatctgg aggaagaaa cagtgaaag aagaagtaa aaccatttag tattagatt agaataagt caactgtgc cacacatgtt gaataaaaa aaaaaaaag aggtgtgtt ttgtcacaca gggcagtcct tcagcaccag agcagtgat ggtctgagac tctcttagga gcagagctct gcgcgaatgg ccattgtggg atccacacct ggtctgagg gcaactgagt ctgagggaga agagcggccc tatgcatgtt tagatgccc tgataagaa catctgtctt gtgaaagact caatgagctg ttatgttga aacaggaagc atttcacatc caaacgagaa aatcatgtaa acatgtgtct tttctgtaga gcataataa tggatgagt tttgcaaaa aaaaaaaa aaa </p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p> tgcataccgc gccgggctt ctgggggtgt ccccaaccac ggccagccc tgccacacc A cccgccccg gccctcgag ctcgcatgg gcgggggggt gctgtctctg ggcgctccg agcccgtaa cctgtctgtc gcgcacccg ccccgacgg gcggccacc gcggcgggc tgctgggtcc cggctgccc cccgctctgt tgcgtctcc gcgcagcga agccccgagc cgtgtctca gaagtggaca ggcggcatgg gctgtctgat ggcgtctc ctgctgtca tcgtggcggg caatgtgtg gtgcatctgg ccataccaa gacgcggcg ctgcagagc </p>	Homo sapiens

50	Beta-1 adrenoceptor	NP_000675.1	<p> taccacact cttcatcatg tccttgcca gcgcgacct ggtcatgggg ctgctggtgg tgccgttcgg ggcaccatc gtggtgtggg ggcgtgga gtagcgctcc ttcttctgcg agctgtggac gtcagtggac gtgctgtggg tgaaggccag catagagacc ctgtgtgtca ttgcccggga cgcgtacatc gcatcacct cgccttccg ctaccagacc ctgctgacgc gcgcgcgggc ggggggacct gtgtgcaccg tgtgggacct ctgcgcctcg gtgtccttcc tgccatcct catgactgg tggcgggcgg agagcacga ggcgcgcgc tgctacaacg accacaagt ctgcgaatc gtaaccaac ggcctacgc catgcctcg tccgtagtct ccttctacgt gccctgtgc atcatggct tctgtacct gcgggtgttc cgcgaggccc agaagcaggt gaagaagatc gacagctcg agcgcgttt cctcgcgcc ccagcgggc cgccctgcc ctgcctcgc cccgtcccc gcgcgcgc ggcgcgcga ccccgcgcc cgcgccgc cgccgcacc gcccgctgg caaacgggcg tgcgggtaa ggcgggcct cgcgctcgt ggcctaacg gacagaagg cgctcaagac gctgggcat atcatggcg tcttcacgt ctgctggctg ccttcttcc tggcacaagt ggtgaaggcc ttccacgcg agctgtgcc cgaccgctc ttctcttct tcaactggt ggcctacgc aactggcct tcaacccat catctactg cgaagcccc acttcgcaa ggccttcag ggaactgtct gctgcgcg cagggtgcc cgcgcgcgc acgcgacca cggagaccg ccgcgcct cggtgtct gcccgccc gccacccgc catcgcccg ggcgcctcg gacgacgag acgacgtgt cgtcggggc agcgcgcgc cgcctgct ggcgcctgg ggcgtgca acggcggggc ggcggcgac agcactcga gctggacgc cgcgtgcgc cccgcttcg cctcggaac caaggttag ggcgcgcgc gggcgcgga ctcgggcac ggttccacg gggaacgag agatctgtgt ttactaaga ccgatacag gtaactcga agccacat cctcgtctga atcatccgag gcaagagaa agccacgga ccgttgaca aaaaaggaa tttgggaag gatgggagag tggttgctg atgttcttg ttg </p>	Homo sapiens
51	Beta-2 adrenoceptor	NM_000024	<p> MGLMALIVL LIVAGNVLI VAIKTPRLQ TLTNFTMSL ASADLVNGLL VVFGATIV WGRWEYGSFF CELWTSVDVL CVTASIELTLC VIALDYLAI TSPFRYQSLL TRARAGLVC TVWALSALVS FLPIIMHWR AESDEARRCY NDPKCCDFVT NRAYAIASSV VSFVPLCIM AFVYLRVRE AOKQVKIDS CERRELGPA RPPSPSPV PAPAPPPPP RPAATAATAP LANGRAGRR PSRLVALREQ KALTLGIIM GVFTLCWLPF FLANVVAHF RELVPRLEFV FENWLGYNAS AFNPIIYCRS PDKRAFOGL LCCARRARR RHATHGDRPR ASGLARPGP PSPGAAGDD DDDVVGATP PARLEPWAG CNGGAAADSD SSLDEPCRP FASESKV actgcgaagc ggattcttca gagcacgggc tggaaactggc aggcacgcg agcccttagc A accgcacaag ctgagtgtgc aggcagagtc ccacacac ccacacac cgcgtgaaat gaggcttcca ggcgtccgct cgcgcgcgc agagccccc cgtgggtccg cccgtgagg cgcccccagc cagtgcgctt acctgcaga ctgcgcgcca tggggcaacc cgggaacggc agcgccttct tgcctgcac caatagaagc catgcgcgc accacagct cagcagca agggacagag tgtgggtggt gggcatgggc atcgtatgt ctctcatgt cctggccatc gtgtttggca atgtgctggt catcacagcc attgcaagt tcgagcgtct gaagacggtc accaactact tcatcacttc actggcctgt gctgatctgg tcatgggctt ggcagtggtg ccctttgggg cgcgccatat tcttatgaaa atgtggactt ttggcaactt cgtgtgcgag ttttggactt ccattgatgt gctgtgcgtc acggccacga ttgagacctt gtcgtgtgatc </p>	Homo sapiens

52	Beta-2 adrenoceptor	NP_000015.1	<p> gagtggtgc gctactttgc cattacttca cctttcaagt accagagcct gctgaccaag aataaggccc ggtgatcat tctgatggtg tggattgtgt caggccttac ctccttttg ccattcaga tgcactggtg ccgggccacc caccaggaag ccataactg ctagccaat gagacctgct tgcacttctt caggaacca gctatgcca ttgctcttc catcgtgcc ttctacgttc cctgtgtgat catgtcttc gctactcca ggtctttca gtaggcca aggcagctcc agaagattga caaatctgag ggccgttcc atgtccagaa ccttagccag gtggagcagg atggggcgac ggggcatgga ctccagat ctccaagt ctgcttgaag gagcacaaag cctcaagac gttaggcatc atcatgggca ctttaccct ctgctggctg cctttctca tegttaacat tgtgcatgtg atccaggata acctaccct taaggaggtt tacatctcc taaattggt agctatgtc aattctggt tcaatccct tatctactgc cggagccag atttcaggat tgccttccag gacttctgt cctggcgag gcttctttg aggcctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatatac gtggaacagg agaaagaaaa taaactgctg tgtgaagacc tccaggcac ggaagacttt gtggccatc aggtactgt gctagcgt aacattgatt cacaaggag gaattgtagt acaaatgact cactgtgtga agcagtttt tctactttta agaccctcc ccccccac agaacactaa acagactatt taacttgagg gtaataaact tagaataaaa ttgtaaaaat tgtatagaga tatgcagag gaaggcatc ctctgcctt tttattttt ttaagctgta aaaagagaga aaacttattt gagtattat ttgtatttg tacagttcag ttcctcttg catggaattt gtaagtttat gtctaaagag ctttagctt agaggcctg agtctgctat atttcatga cttttccatg tatctacctc actattcaag tattagggtt aatataatgc tgtgtgtaat ttgtatctga agagatttt ccttctaca ccttggaat tgaggattt gagtatctg gacctttcag ctgtgaacat ggactcttc cccactctc ttatttgctc acacgggta ttttaggcag ggatttgagg agcagcttca gttgtttcc cgagcaaaag tctaaagttt acagtaata aatgtttga ccatg </p>	Homo sapiens
53	Beta-3 adrenoceptor	NM_000025	<p> 52 640 643 </p>	Homo sapiens

54	643	Beta-3 adrenoceptor	NP_000016.1	MAPWPHENSS LAIPWDLPTL APNTANTSGL PGVPWEAALA GALLALAVLA TVGNNLLIV P	Homo sapiens
<p>gctacctggc tgtgaccaac ccgctgcgtt acggcgcaact ggtcaccagg cgctgcgccc ggacagctgt ggtccctggtg tgggtcggtg cgccgcggtt gtcgttttgcg cccatcatga gccagtgtg ggcgtaggg gcgcacgcg aggcgcagcg ctgceactcc aaccggcgct gctgtgcctt cgcctccaac atgccttaag tgcgtctgc ctccctcgtc tcttttacc ttcctcttct cgtgatgctc ttgcttacg cgcgggtttt cgtgttggt acgcgcagc tgcgttgct gcgcggggag ctgggcgcgt ttccgcccga ggagtctcg ccgggcgcgt cgcgtctct ggcgcgggcc ccggtgggga cgtgggtcc gccggaagg gtgcccgcct gcggcggcg gcgcggcgc ctcctgcctc tcgggaaca ccgggcctcg tgcacctgg gtctcatcat gggaacctc actctctgt ggtgcctt ctttctggcc aactgtctgc gcgcctggg ggcccctct ctagtcccg gccgggtt cttgcctg aactggctag gttatgcaa ttctgcttc aaccgctca tctactgcg cagccgggac ttctgcagcg ccttcgcg ttctctgtg cgtgcggcc tgcgtctgc tccggagccc tgcgcgcg ccgcgcggc cctctccc tgggcgttc ctgcggccg gagcagccca gcgcagccca ggctttgcca aggcctcgac ggggcttctt ggggagtctc ttaggcctga agacaagaa gcaacaactc tgttgatcag aactgtgga aactctcg cctctgttca gaatgagtc catgggattc ccggctgtg aactctacc ctccagaacc tgacgactgg gccatgtgac ccaaggagg atccttacc agtgggtttt caccatctc ttgctctctg tctgagagat gttttctaaa ccgagcctt gaacttcaact cctccctcag tggtagtgc cagggtccgt ggagcagcag cctggcttgg ttaggggcac ccatacccg cttgctctgt gcagtcagtg agtgcttagg gaaaagagag ctccctgtt tccattcctt ctgcaccca aacctgatg agacctagt gttctccag ctctgtggc caggctgaga gcagcagggt agaaaagacc aagatttggg gttttatctc tggttccctt attactgctc tcaagcagtg gctctctca cttagccat ggaatggctc cgtatcact cagcagcagtg tcagaaggac ttgcagagg tttgggagc tcaggggttc ataagaagt gaaccttag aacagatccc ttctttctt tttgcaatca gataaataa tatcactgaa tgcagttcat cctcgggcca ctttccctcc gttgttttc ttctcataat ccaattact ccttccctc tactctgcg tggctttga cagaggcagt aaattaggcc taatctctac tcttttcttc ctaattctca tcaaaaaa aatgaaaagt ctgtctggac gaaggggagt gacttgagc ctttgatctc ttgctcccc acccttctg aaactcttga aatccagttg ccattgagta gaaaagccac gctccacaca ggacttgac agaggggcca cagggggatg ggctggctgt ggcaggttt agggcagggg gcatttgc cctccatgct ataaccagt ggtgccttac atggtgtgtg tgtgtgtgtg tgcgtgtgtg tgtgtgtgtg tgtgtctgga ggcacaggca caaagcattg cttgggttgg tcaaatgtct tgtgtcataa atatactctg atgttccca gccttccac aacctctacc ttcccaactca ccttcccag ctcaaaaaat ctgtattatc ctcttaagt aaaaaggag ttac</p>					
<p>AIAWTPRIQT MTNVFTSLA AADLVNGLIV VPPAATIALT GHWPLGATGC ELWTSVDVLC VTASIEFLCA LAVDRYLAVT NPLRYGALVT KRCARPAVL VVVSAVSF AFIMSQWVRV GADAEQRCH SNRCCAFAS NMPYVLLSS VSFYLLIVM LFVYARFVV AFQLRLRG ELGRFPPEES PPAPSRLAP APVGTCAPE GVPACGRRA RLLPLREHRA LCTIGLIMGT FTLCWLPPFL ANVLRALGGP SLVPGPAFLA LNWLGANSA ENPLIYCRSP DFRSAFRLL</p>					

55	688	Opsin, blue- sensitive	NM_001708	<p>CRCGRRLPPE PCAAARPALF PSQVPAARSS PAQRLCQRL DGASWGVs</p> <p>ggcatccatg agaaaaatgt cggaggaaga gttttatctg ttcaaaata tctctcagt A</p> <p>ggggcgtgg gatgggcttc agtaccacat tgccctgtc tggccttct acctccaggc</p> <p>agctttcatg ggcactgtct tccctatagg gtccctactc aatgccatgg tggctgtggc</p> <p>cacactggc tacaaaaagt tggcgagcc cctcaactac attctgtca agctgtcctt</p> <p>cggaggcttc ctctctgga tctctctgt ctctctgtc ttctggcca gctgtaacgg</p> <p>atacttgct ttcgggtggc atgtttgtg ttggaggggc ttctgggca ctgtagcagg</p> <p>tctggtaca ggatggteac tggccttctt ggccttgag cgctagattg tcatctgtaa</p> <p>ggccttggc aacttcogct ttagctccaa gcatgactg acggtgttcc tggctacctg</p> <p>gaccttggt attgggtct ccatccacc cttcttggc tggagccggt tcatcctga</p> <p>gggcctgag tgttctgtg gcoctgact gtacacctg ggcaccaa accgcagga</p> <p>gtcctatag tggttcctt tcatcttctg cttcattgt cctctctcc tcatctggtt</p> <p>ctctacat cagctgtga gggcctgaa agctgtgca gctcagcgc aggagtcagc</p> <p>tacgaccag aaggctgaac gggaggtgag cgcgatggg gttgtatgg taggatcctt</p> <p>ctgtgtctg tactgtcct acgggctt cgcctgtac atggtcaaca accgtaacca</p> <p>tgggctggac ttacggctg taccattcc ttcatcttc tccaagagt cttgcatcta</p> <p>caatccatc atctactgt tcatgaataa gcagttccaa gcttgcata tgaagatgg</p> <p>gtgtgggaag gcatgacag atgaatccga cacatgcag tcccagaaaa cagaagtct</p> <p>tactgtctg tctaccdaag ttggcccaa ctgaggacc aatattggc tgttgeaac</p> <p>agctagaatt aaatttact</p>	Homo sapiens
56	688	Opsin, blue- sensitive	NP_001699.1	<p>MRKMSSEEFY LFNMISSVGP WDGPYHIAP VWAFLQAAF MGTFLIGFP LNAMVLATL P</p> <p>RYKLRQPLN YILNVNVSFG FLICFVSFP VFVASCNGYF VEGRHVCALE GFLGTVAGIV</p> <p>TGWSLAFIA ERYVICKEF GNFRSSKHA LTVLANWTI GIGVSIPFF GWSRFIPEGL</p> <p>QCSCGPDWYT VGTKYRSEY TWFLIFCFI VPLSLICFSY TQLRLAKAV AAQQESATT</p> <p>QKAEREVSRM VVMVGSFCV CYVPYAFAM YMNVRNHGL DLRLVTIPSF FSKSACIYNP</p> <p>IIFYCFMKNQF QACIMKMWCG KAMIDESDTC SSQKTEVSTV SSTQVGNP</p> <p>gagtatctgg atgtcttga tttctctcc attctgtct gttctgtct cctaatacca A</p> <p>tctcgttact agcgtaggc attggacgtg acaatacaact gcatttgaac tgagaagaag</p> <p>aaatattaaa gacacagtct tcagaagaaa tggcicaag gcagcctcac tcacctaatc</p> <p>agactttaat ttcaatcaca aatgacacag aatcatcaag ctctgtggtt tctaacgata</p> <p>acacaaataa aggatggagc ggggacaact ctccaggaat agaagcattg tgtgccatct</p> <p>atattactta tgcgtgtatc atttcagtgg gctccttgg aatgctatt tcatcaaaag</p> <p>tctttttcaa gaccaaattc atgcaaacag ttccaatat tttcatcac agcctggctt</p> <p>ttggagatct ttacttctg ctaacttgg tgcagtgga tgcaactcac tacttggcag</p> <p>aaggatggct gtccggaaga attggttga aggtgtctc ttctatcgg ctaacttctg</p> <p>ttgggtgtc aggtttcaca ttaacaattc tcagcgtga cagatacaag gcagtttga</p> <p>agccacttga gcacagccc tccaatgcca tctgaagac ttgtgtaaaa gctggctgg</p> <p>tctggatcgt gtctatgata ttgtctctac ctgaggtgat atttcaaat gtatacatt</p> <p>ttcgagatcc caataaaat atgacatttg aatcatgtac ctctatcct gctctaga</p> <p>agctcttga agaaatacat tctctgtgt gcttctagt gtctacatt attccactct</p> <p>ctattatct tgtctactat tctctgattg ctaggacct ttacaaagc acctgaaca</p>	Homo sapiens
57	692	Bombesin Receptor Subtype-3	NM_001727		Homo sapiens

Homo
sapiens

NP_001718.1
Bombesin
Receptor
Subtype-3

58

692

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PEAIFSNVYT FRDPNKNMTF ESCTSYPSVK KLLQEIHSLL CFLVFYIPL SIISVYVSLI
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NM_001716

59

729

CXC
Chemokine
Receptor 5

Homo
sapiens

60	729	CXC Chemokine Receptor 5	NP_001707.1	MNYPLTLEMD IFLLGVIGNV LCKTVIALHK ALPEILFAKV VWHLRQAOQR PVAITMCEFL SESENATSLT	LENLEDLWE LVIVILERHR VNFVYCSSLIL SQGHNNNSLP RPOQKAVRV GLAHCCLNPM TF	LDRLDNYNDT QTRSSTETFL ACIAVDRYLA RCTFSQENQA AIIVTISIFEL LYTFAGVKFR SDLSRLTLTKL	SLVENHLCPA FHLAVADLLL IVHAVHAYRH ETHAWFTSRF CWSPYHIVIF LDTLARIKAV DNTCKLNGSL	TEGPLMASFK VFIPLFAVAE RRLLSIHITC LYHVAGFLLP LDMVGWCYVG LDTLARIKAV DNTCKLNGSL	AVFVPVAYS GSVGWVLGTF GTIWLVGELL MLVMGWCYVG DNTCKLNGSL LFPSSRRSSL	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	ggcacgagcc ggatggaaac atgcaactcc tgtaactcctt tgcaatacaa acctgtcttt tttttggiga agatcttttt ttgccttgcg tggccatctt accacactg	cagaaacaaa tccaaacacc gtgccagagag ggatattgtc gaggctaaaa cctgttccag tgccatgtgt catcatctcg ggcacggacc ggcttccatg tttctctcac	gacttcacgg acagaggact gtgaacgaga attggcctgg aacatgacca cttcccttct agatcctctt ctgacgattg gtcacttttg ccaggcttat tttctctcac	acaaagtccc atgacacgac gggecttttg tggaaacat gcatctacct ggatgacta ctgggtttta ttacacaggc ggccatcact gtgtcatcac gacccaatg aagctctacg	ttggaaccag cacagagttt ggcccaactg cctgggtggtc cctgaacctg caagtgaag ttacacaggc ggccatcact cagcatcgc gacccaatg agagtgaag	agagaagccg gactatgggg ctgcccctc ctgggtcttg gccattttg gatgactggg ttgtacagcg cagcgcgtgt atttggccc gaattcactc ctgtttcagg	Homo sapiens

62	735	C-C	NP_001286.1	Chemokine Receptor 1	<p>ctctgaaact gaacctcttt gggttggtat tgcctttgtt ggtcatgata atctgtaca caggattat aagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtcgtt tgattttgt catatgata atctttttt ctttttgac cccctacaat ttgactatac ttattttgt ttccaagac tctctgttca ccatgagatg tgagcagagc agacatttgg acctggtgt gcaagtgaag gagtgatcg cctacacgca ctgctgtgtc aacctagtga tctacgctt cgttggtgag aggttcgga agtacctgc gcagttgttc cacagcgctg tggtgtgca ctgtgttaaa tggctccct tctctccgt ggacaggtg gagagggtca gctccacatc tccctccaca ggggagcatg aactctctgc tgggttctga ctcagaccat aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acactgagcc agcagcctgg ctctccagc caggttctga ccttggcac agcatggagt cacagccact tgggatagag agggaaatga atggttgctt gggcttctg agcttctgtt ggttcagtc tttccatga acttctccc tggtagaaag aagatgaatg agcaaaacca aatattccag agactgggac taagtgtacc agagaagggc ttgactcaa gcaagatttc agatttga ccatagcat ttgtcaaaa agtccaccac tcccaactat tgcctgcaca aaccaattaa acccagtagt ggtgactgtg ggtccattc aaagtgaact cctaagccat gggagacact gatgtatgag gaatttctgt tcttccatca cctccccc cccgccacc tcccactgcc aagaacttgg aaatagtat tccacagtg actccactct gactccaga gccaatcagt agccagcatc tgctccctt tcaatccac cgcaggattt gggctcttgg aatcctggg aacatagaac tcatgacgga agagttgaga ctaacagaga aatagaatg ggggaactac tcttggcagt ggaactaaga agcccttag gaagaatttt tatatccact aaatcaaac aattcaggga gtgggctaag caggggcat atgaataaca tgggtgctt cttaaaatag ccaataaggg gagggactca taatttccat ttaaccttct tttctgacta ttttcagaa tctcttct tttcaagtgt ggtgatagt tggtagattc taatggttct catctaaagc ttaataacag gcaaaaggaa gcagggttgg tttcccttct tttgttct catctaaagc tctgtgttt atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaa METPNTEDY DTTFEDYGD ATPQKNER AFGAQLPL YSLVFVGLV GNILVVLV P OYKRLKNTS IYILNLAIS LLEFLTPFW IDYKLDDWV FGDAMCKTIS GFYTGLYSE IFFIILLTID RYLAIVHAFV ALRARTVTFG VITSIIWAL AILASMPGLY FSKTQWETH HTCSLHFPHE SLREMKLFOA LKLNLFGLV PLLVMITCYT GIILKILRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLEF HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVKWLPF LSVDRLEVS STSPSTGHE LSAGF ttttcttct tctatcacag ggagaagtga aatgacaacc tcaatagata cagttgagac A ctttgtacc acatcctact atgatgactt gggcctgctc tgtgaaaaag ctgatacacg agcactgatg gccagtttg tgcctccgtt gtaactccgt gtgttccact tgggctctt gggcaatgtg gtgttggtga tgactctcat aaataacag aggtccgaa ttatgaccaa catctacctg ctaaaccttg ccatttcgga cctgctcttc cctgcaccc ttccattctg gatccactat gtacaggggc ataactgggt ttttgccat ggcattgtga agctctctc aggggtttat cacacaggct tgtacagcga gatcttttc ataactctgc tgacaataga caggtaacctg gccattgtcc atgctgtgtt tgcccttcga gcccgactg tcaatttgg tgtcatcacc agcatcgta cctggggcct ggcagtgcta gcagctcttc ctgaatttat cttctatgag actgaagagt tgttgaaga gactcttgc agtctctt accagagga</p>	Homo sapiens
63	737	C-C	NM_001837	Chemokine Receptor 3	<p>ctctgaaact gaacctcttt gggttggtat tgcctttgtt ggtcatgata atctgtaca caggattat aagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtcgtt tgattttgt catatgata atctttttt ctttttgac cccctacaat ttgactatac ttattttgt ttccaagac tctctgttca ccatgagatg tgagcagagc agacatttgg acctggtgt gcaagtgaag gagtgatcg cctacacgca ctgctgtgtc aacctagtga tctacgctt cgttggtgag aggttcgga agtacctgc gcagttgttc cacagcgctg tggtgtgca ctgtgttaaa tggctccct tctctccgt ggacaggtg gagagggtca gctccacatc tccctccaca ggggagcatg aactctctgc tgggttctga ctcagaccat aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acactgagcc agcagcctgg ctctccagc caggttctga ccttggcac agcatggagt cacagccact tgggatagag agggaaatga atggttgctt gggcttctg agcttctgtt ggttcagtc tttccatga acttctccc tggtagaaag aagatgaatg agcaaaacca aatattccag agactgggac taagtgtacc agagaagggc ttgactcaa gcaagatttc agatttga ccatagcat ttgtcaaaa agtccaccac tcccaactat tgcctgcaca aaccaattaa acccagtagt ggtgactgtg ggtccattc aaagtgaact cctaagccat gggagacact gatgtatgag gaatttctgt tcttccatca cctccccc cccgccacc tcccactgcc aagaacttgg aaatagtat tccacagtg actccactct gactccaga gccaatcagt agccagcatc tgctccctt tcaatccac cgcaggattt gggctcttgg aatcctggg aacatagaac tcatgacgga agagttgaga ctaacagaga aatagaatg ggggaactac tcttggcagt ggaactaaga agcccttag gaagaatttt tatatccact aaatcaaac aattcaggga gtgggctaag caggggcat atgaataaca tgggtgctt cttaaaatag ccaataaggg gagggactca taatttccat ttaaccttct tttctgacta ttttcagaa tctcttct tttcaagtgt ggtgatagt tggtagattc taatggttct catctaaagc ttaataacag gcaaaaggaa gcagggttgg tttcccttct tttgttct catctaaagc tctgtgttt atgggtcaga gttccgactg ccatcttga cttgtcagca aaaaaaaa aaaaa METPNTEDY DTTFEDYGD ATPQKNER AFGAQLPL YSLVFVGLV GNILVVLV P OYKRLKNTS IYILNLAIS LLEFLTPFW IDYKLDDWV FGDAMCKTIS GFYTGLYSE IFFIILLTID RYLAIVHAFV ALRARTVTFG VITSIIWAL AILASMPGLY FSKTQWETH HTCSLHFPHE SLREMKLFOA LKLNLFGLV PLLVMITCYT GIILKILRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLEF HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVKWLPF LSVDRLEVS STSPSTGHE LSAGF ttttcttct tctatcacag ggagaagtga aatgacaacc tcaatagata cagttgagac A ctttgtacc acatcctact atgatgactt gggcctgctc tgtgaaaaag ctgatacacg agcactgatg gccagtttg tgcctccgtt gtaactccgt gtgttccact tgggctctt gggcaatgtg gtgttggtga tgactctcat aaataacag aggtccgaa ttatgaccaa catctacctg ctaaaccttg ccatttcgga cctgctcttc cctgcaccc ttccattctg gatccactat gtacaggggc ataactgggt ttttgccat ggcattgtga agctctctc aggggtttat cacacaggct tgtacagcga gatcttttc ataactctgc tgacaataga caggtaacctg gccattgtcc atgctgtgtt tgcccttcga gcccgactg tcaatttgg tgtcatcacc agcatcgta cctggggcct ggcagtgcta gcagctcttc ctgaatttat cttctatgag actgaagagt tgttgaaga gactcttgc agtctctt accagagga</p>	Homo sapiens

64	737	C-C Chemokine Receptor 3	NP_001828.1	<p> tacagtatat agctggaggc attccacac tctgagaatg accatcttct gtctgcttct cctctgctc gttatggcca tctgctacac aggaatcatc aaacgctgc tgagtgccc cagtataaaa agttacaagg cctccgggt cattttgtc atcatcgcg tggtttcat ttcttgaca cctacaatg tggctatctt tctctcttc tatcaatcca tcttattgg aaatgactgt gagcgagca ageatctgga cctggtcatg ctggtgacag aggtgatcgc ctactccac tggctgcatg acccggtgat ctacgcttt gttggagaga ggttcggaa gtaccctgcg cacttcttc acggcactt gctcatgca cgggcagat acatccatt cctctctagt gagaagctgg aaagaaccag ctctgtctct ccatccacag cagagccgga actctctatt ggttttagg tcagatgcag aaaattgctt aaagaggaag gaccaaggag atgaagcaaa cacattaagc cttccacact cactctaaa acagtcttc aaactccag t </p>	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	<p> 1 MTSLDTVET FGTSYYDDV GLICEKADTR ALMAQFVPL YSLVFTVGLL GNVAVMILI P KYRLRIMTN IYLLNLASD LFLVTLPEW IHYVRGHNW FGHGCKLLS GFYHTGLYSE IFFIILLTID RYLAIVHAVF ALRARTVTFG VITSIVTWGL AVLAALPEFI FYETEELFEE TLCSALYPED TVYSWRHFT LRMIFCIVL PLIVMAICYT GIITLLRCP SKKKYKAIRL IFVIMAVEFI FWTPYNVAIL LSSYSILFG NDCERSKHL LMLVTEVIA YSHCCMNPVI YAFVGERFRK YLRHFFRHL LMLGRYIPF LPSEKLETS SVSPSTAEPE LSIVF cgggggtttt gatctctctc cctctcttct tctcccttc tctctctct cctccctccc A tctctctatt cctctctct tctccctcag tctccacatt caacatgac aagtcacatc agaaaagcaa gctgctcttg gttgggccc gactgctct gagcagctg tagagttaaa aaatgaaccc caggatata gcaatacca cctcgatga agcatatata agcaattact atctgtatga aagatcccc aagccttga ccaagaagg catcaagca tttggggagc tctctctgc cccactgtat tcttggttt ttgtatttg tctgcttga aattctgtg tgggtcttgt cctgttcaaa tacaagcgc ttaggtccat gactgatgtg tacttgctca accttgccat ctcgatctg ctctctgtgt tttctctcc ttttggtgc tactatgag cagaccagtg ggtttttggg ctagtctgt gcaagatgat tctctgagat ctggcgatag gcttttacag tggcatattc ttgtctatgc tcatgagcat tgatagatc ctggcgatag tgcacgggt gtttctctg agggcaagga cctgactta tgggtctatc accagtttg ctacatggtc agtggctgtg ttgctctcc tctctggtt tctgtcagc acttggtata ctgagcgcaa ccatacctac tgaataacca agtactctct caactccag acgtggaggg ttctcagtc cctggaaatc aacattctcg gattgtgat cccctaggg atcatgctgt ttgttactc catgataatc agaaccttgc agcattgtaa aaatgagaag aagaacagg cgggtgaagat gatctttgccc gtggtggtcc tctctcttg gttctggaca cttacaca tagtctctt cctagagacc ctggtggagc tagaagtcct tcaggactgc acctttgaa gatacttga ctatgcatc caggccacag aaactctgc tttgttccac tgctgcttia atcccatcat ctactttttt ctgggggaga aattcgcaa gtacatcta cagctcttca aaactgacg gggccttttt gtgctctgca aatactgtgg gctctccaa attactctg ctgacacccc cagctcatct tacacgcagt ccacatgga tcatgatctt catgatctc tgtaggaaaa atgaatgggt gaaatgcaga gtcaatgaac tttccacat tcagagctta ctttaaaatt ggtattttta ggtgaagagt cctgagcca gtgtaggag gaaggttac accacagtg gaaagacagc ttctctctt cctgagcagt tttctctcc cactagacaa </p>	Homo sapiens

66	738	C-C	Chemokine Receptor 4	NP_005499.1	67	741	C-C	Chemokine Receptor 7	NM_001838
				gtccagcctg gcaagggttc acctgggctg aggcattcct cctcacacca ggttgccctg caggcatgag tcagttctgat gagaactctg agcagtgctt gaatgaagtt gtaggtaata ttgcaaggca aagactattc cctttaacc tgaactgat ggttctctca gagggaattg cagagtaact gctgatggag taaatcgta ccttttgctg tggcaaatgg ggcctcgc VLVLFKYKRL RSTMDVYLIN LAISDLLFV SLPEWGYAA DQWFGGLGK KMISWYLVG FYSGIFFWML MSIDRYLAIV HAVFSLRART LTYGVITSLA TWSVAVFASL PGFLESTCYT ERNHTYCKTK YSINSTTWKV LSSLEINILG LVIPLGIMLF CYSMIIRTLO HCKNEKNKA VRMIFAVVL FLGFWTPYNI VLFLETLVEL EVLOCTFER YLDAIQAOTE TLAFFHCCLN PIIYFFLGK FRKYLQLFK TCRGLFVLCQ YGDLQIYSA DTPSSYTSQ TMDHDLHDAL gtgagacagg gctagtggga gcccgggac agccttcctg tgtggtttta cgcgccagag A agcgtcatgg acctggggga accaatgaa agcgtaggtc acgacgatt acatcgaga caacaccaca ttccaggat gctgtgtgca agcattgaa agcgtaggtc acgacgatt acatcgaga caacaccaca gtggactaca ctttgttoga gtctttgtgc tccaagaagg acgtgggaa ctttaagcc tggttctctc ctatcatgta cctcatcatt tgtttgtgg gctactggg caatgggctg gtcgtgttga cctatatcta ttccaagagg ctcaagacca tgaccgatac ctacctgctc aaactggcgg tggcagacat cctctctctc ctgaccttc cctttgggc ctacagcgcg gccaagtctt ggttctctgg tgtccactt tgcaagctca tctttggcc ctacaagatg agttcttca gtggcatgct cctattctt tgcatcagca ttgaccgcta cgtggccatc gtccaggtg tctcagctca cgcaccagt gcceggctcc ttctcatcag caagctgtcc tgtgtgggca tctggatact agccacagtg ctctccatcc cagagctcct gtacagtgac ctccagagga gcagcagtga gcaagcgatg cgatgctctc tcatacaga gcatgtggag gcctttata ccatccaggt ggcacagatg gtgatggct ttctggctcc cctgctggcc atgagcttct gttaccttgt cateatcgc accctgctcc aggcagctca ctttgagcgc aacaaaggcca tcaagtgat catcgctgtg gtcgtggtt tcatagtctt ccagctgccc tacaatgggg tggctctggc ccagacggtg gccaatctca acataccag tagcactgt gagctcagta agcaactcaa catcgctac gacgtcacct acagctggc ctgctgctcg tgtgcgta accctttctt gtagccttc atcgcgctca agttcgcgca cgtatctctc aagctcttca agaacctggg ctgctcagc caggagcagc tccggcagtg gtcttctgt cggcacatcc ggcgtctctc catgagtgtg gaggcgaga ccaccaccac cttctccca taggcgactc ttctgcttgg actagaggga cctctccag ggtcctggg gtggggatag ggagcagatg caatgactca ggacatcccc ccgcacaaa ctgctcaggg aaagcagct ctccccca agtgcaagcc ctgctccaga agttagcttc accccaatcc cagctacctc aaaccaatgc gaaaagaca gggctgataa gctaacacca gacagacaac actgggaaac agaggctatt gtcccctaaa ccaaaaactg aaagtgaag tccagaact gttccacct gctggagtga agggggccaag gaggtgagt gcaagggggc tgggagtggc ctgaagagtc ctctgaatga accttctggc ctcccacaga ctcaaatgt cagaccagct cttccgaaaa caaggcctta tctccaaagc cagagatagt ggggagactt cttggcttgg ttgagaaaag cggacatcag ctggtcaaac aaactctctg aacctctc tccatctgtt tcttcaactg cctccaaagg agcggggaat gcagctgcca cgcgcctca aaagcacact catccctca cttggccgct cgcctccca ggctctcaac agggagagt gtggtgttct ctgagggcca					

68 741 C-C Homo sapiens

NP_001829.1
Chemokine
Receptor 7

ggccagctgc ctccgcgtga tcaaaagccac actctggggt ccagagtggg gatgacatgc
actcagctct tggctccact gggatgggag gagagacaa gggaaatgtc agggcgggg
aggtgacag tggccgccca aggcacgag ctgttctttt gttcttgtc acaggactg
aaaacctctc ctcatgttct gcttcgatt cttaagaga gaaactttt accacacac
agataaagt ttcccttgag gaaacaacag ctttaaaag
LPIMYSIICF VGLLNGLVW LTYIYFKRLK TMTDYLLNL AVADILFLT LPFWAYSAAK
SWVFGHFCK LIFAIYKMSF FSGMELLICI SIDRYVAIVQ AVSAHRHRAR VLLISKSCV
GIWILATVLS IPELLYSDIQ RSSEQAMRC SLITEHVEAF ITIQVAQWVI GFLVPLILAMS
FCYLVIRTL LQARNFERNK AIKVIIVVV VFIVQLPIN GVLAQTVAN FNITSSTCEL
SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLEKL FKDLGCLSOE QLQWSSCRH
IRRSMSVEA ETTTTFSP

69 742 C-C Homo sapiens

AI733823
Chemokine
Receptor 8

TTTAAATTTA AAAACTTTAT TGGATAGCA TGTTAGCAGC AGTGAACAGG GCATGGCACA A
GAAGTTTCC AAAACAAGTT TAGCATGAAG GATGCCATAT GCTGTGCGCA ACAACTAGAA
CACGGTGACT AAAGACACAG TTCTGAATGT CCAGACACAC CTCTGGCCTG CAACATATGT
CAGTGATGAT GATAAACAAAG GTGGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA
AAAATGATGT CTGACCTCCT TATATATGTA AAAATATATC GTTCAGAGTC CGTCAGTAAG
CTGGAAGAAG TGGATGTGA AGTTTTAAC ATCGATGATG GGTCTCCAGT TGTTCATCAA
CCCATGGTGA AATAGCTGAA CGGTTCTGAA TCAAAAGTGA TCCTAATAGT GAAGACATTA
ACATTGCAGA AAAAGTGCTT ACAGATTATA TGGTGAAAAAT ACGTGATGGG CTTCCTGAAG
GACTAGACA GTGTGTATTC AAAACAGAAC AGAATATCAC GTCAGTTTAT
TGCCAAATAT GCTGTTGCCA ACACCTAGAA CACATGACT GGAGACACAG TTGTGCGTGC A
TGCGACAAC CTCCAGCCTG TGCTATGTT CAGTGATGAT GATGAGCAAG GTGGTGACTT
TGAAGGATTT TGTATATCAA GTGAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA
CATATACCTT CAAAATCCAT CAATAAGCTG AAAGAAATAG ATATCAAAGA ATATTTTAAC
ATCATTAAATG AGGCTCCAGT TATTCATTCA TTGACCAATG GTAATATAGC TGAATGATTT
CTGAATCAAG CTGATTATGA TAAATAGTAT GATGAAGATG ATGTTAATAC TGCAGAAAAA
GTGCCATATA ATGACACAGT GAAA

70 742 C-C Homo sapiens

LG6770
Chemokine
Receptor 8

ctccagagag gctgctgtct atgagctgc actcacatga ggatacagac tttgtgaaga A
aggaattggc aacactgaaa cctccagaac aaagctgtc actaaggtcc cgctgccttg
atggattata cacttgacct cagtgtgaca acagtgcacg actactacta cctgatatac
ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagtgtct cctgtgtgtc
ttttattgcc tctgtttgt attcagttt ctgggaaaca gctgtgtcat cctgtgtcctt
gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgacct ggcctgtct
gacctgtttt ttgtcttctc ctctcccttt cagacctact atctgtgtga ccagtgggtg
tttgggactg taatgtgaaa agtgggtgtct ggccttttatt acatggctt ctacagcagc
atgtttttca tcacctcat gagtgtggac aggtacctgg ctgtgtcca tgcctgtat
gccctaaagg tgaggacgat caggatgggc acaagctgt gcctggcagt atggctaacc
gccattatgg attcattccc attgctagt tttaccaag tggcctctga agatgggtt
ctacagtgtt attcatttta caatcaacag ctttgaagt ggaagatctt caccacttc
aaaatgaaca ttttaggtt gtgtatccca ttcaccatct ttatgttctg ctacattaaa

71 742 C-C Homo sapiens

NM_005201
Chemokine
Receptor 8

ctccagagag gctgctgtct atgagctgc actcacatga ggatacagac tttgtgaaga A
aggaattggc aacactgaaa cctccagaac aaagctgtc actaaggtcc cgctgccttg
atggattata cacttgacct cagtgtgaca acagtgcacg actactacta cctgatatac
ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagtgtct cctgtgtgtc
ttttattgcc tctgtttgt attcagttt ctgggaaaca gctgtgtcat cctgtgtcctt
gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgacct ggcctgtct
gacctgtttt ttgtcttctc ctctcccttt cagacctact atctgtgtga ccagtgggtg
tttgggactg taatgtgaaa agtgggtgtct ggccttttatt acatggctt ctacagcagc
atgtttttca tcacctcat gagtgtggac aggtacctgg ctgtgtcca tgcctgtat
gccctaaagg tgaggacgat caggatgggc acaagctgt gcctggcagt atggctaacc
gccattatgg attcattccc attgctagt tttaccaag tggcctctga agatgggtt
ctacagtgtt attcatttta caatcaacag ctttgaagt ggaagatctt caccacttc
aaaatgaaca ttttaggtt gtgtatccca ttcaccatct ttatgttctg ctacattaaa

72	C-C Chemokine Receptor 8	NP_005192.1	<p>atcctgcacc agctgaagag gtgtcaaaac cacacaaga ccaaggccat caggttggtg ctcattgtgg tcaattgcat ttaacttttc tgggtcccat tcaactgtgt tcttttccctc acttcccttgc acagtatgca catcttggat ggaatagca taagcaaca gctgacttat gccaccatg tcaagaaat catttccctt actcactgct gtgtgaacc tgttatctat gctttgttg gggagaagt caagaacac ctctcagaa tatttcagaa aggttgagc caaatctca actacctagg agacaaatg cctaggaga gctgtgaaa gtcactatcc tgccagcagc actcctccg ttcctccagc gtagctaca ttttggagg atcaatgaag actaaatata aaaaacattt tcttgaatgg catgtagta gcagttagca aggtgtggg tgtgaagggt tcccaaaaa agtcagcat gaagatgcc atatatgtt ttgccaacac ttaaacaaca atgactggag acatagttgt gcctgctgg cacaaatca agcctgtgat tgtgtttatt gatgatgtg aacaagtgtt aactttaaag gattctgtat gccaaagtga aaaaaagat gtctgacctc ctctatatgc aaaaatatc cttcagagac gtgcagtagg ctggaagag tggatatga agttttgaca tcaatgaca ggctccagtt gtctatgcat tgactgatgg tgaatggct ggaatgattc tgaatcaagg tgattgtgat tatagtaca atgaagatga tgcattaat actgcataaa agtgctgt agatgacatg gtgaaaatat ttgacaggct tatggaagga ctacagcagc acgcattcat aacagaacaa gaaattatct cagcttataa atcaaacag agacttctag acaaaacca ttgttgatga ggcagatgcc tctgaagag agtttataa gccatcaaac acaatgctc atcttccctg gaggaccac ttcctgatcc ctcaactgtg tctgatgtt ctctcactgt aagaaataa aataaaaaat aaaaaatat atatttggtat gtaactacag gaaaaata aaaaatatat agtggacagt aacctttcaa tcaaaactca gtatcataag tagagactga aaactggcg ttattgattg ttgttattaa cagctgatac aggtattctg ctgagtctac tgctgctag ttaccatgaa cacgtttttt cactattaat ggtgggtcat atttttact ttttaagtact tacgtgtgag taagtgaag aaatgattg cttatcagta gtatcaatga tttactcaat atctgaatca ccttgattca gaaccatttc agctgtttca ccatacagta atgaataaca gectcatga tgtcaaaaac tcaaatatcc acttctttca gcctactgta gactctgga gtatactttt tgcatatgta aggaagtcag atttttttt</p>	Homo sapiens
73	CXC Chemokine Receptor 3	NM_001504	<p>MDYTLDSVT TVTDYYPDI FSPCDALII QTNGLLLAV FYCLLFVPSL LGNSLVILVL P VCKKLSIT DVILNLALS DLLFVSFPF QTYLLDQWV FGTVMCKVVS GFYIGFYSS MEFITMSVD RYLAVHAVY ALKVTRMG TTICLAWLT AIMATIPILV FYQVASEGV LOCYSFYNQO TLWKIFTNF KNIIGLLIP FTIFMFCYIK ILHQLKRCQN HNKTAIRIV LIVIASLIF WVPFNVLF TSLHSMHILD GCSISQOLTY ATHVTEISF THCCVNPVY AFVGEKFKKH LSEIFQKSCS QIFNVLGRQM PRESCKSSS CQHSRSSSS VDYL ccaaccacaa gcaccaagc agagggcag gcagcacacc accagcagc cagagcacca A gccagccat ggtccttag gtgagtacc accaagtgt aatgacgcc gaggttgccc cctcctgga gaacttcagc tcttctatg actatgaga aaacagagt gactctgct gtacctccc gccctgcca caggacttca gcctgaactt cgaccggcc ttcctgcccag ccctctacag cctcctctt ctgctggggc tgctgggcaa cggcgcggtg gcagccgtgc tgttgagccg gcggacagcc ctgagcagca ccgacacctt cctgctccac ctactgttag cagacacgct gctgtgtgtg acactgccg cctggcaggt ggcgtgccc gtccagtggg tctttggctc tggcctctgc aaagtggcag gtgcctctt caacataaac ttcctacgag</p>	Homo sapiens

74	CXC	NP_001495.1	<p> gagccctcct gctggcctgc atcagctttg accgtacct gaaacatatt catgccaccc agctctaccg ccgggggccc ccggcccgcg tgacctcac ctgctgggt gtctgggggc ttgctgtgt tttggccctc ccagacttca tctctctgc ggcaccacac gacgagcgc tcaacgccac ccaactgcaa tacaacttc cacagggtgg ccgaaggct ctgagggtgc tgagctggt ggctggcttt ttgctgccc tgcctgctat ggctactgc tatgccaca tctggccgt gctgctggt ttccaggggc agcggcgct ggggccatg cggctggtgg tgggtgtgt ggtggccttt gccctctgt ggaccccta tcactgtgt gtcgtgggtg acatcctcat ggacctgggc gctttggccc gcaactgtgg ccgagaaagc aggttagacg tggccaagtc ggtcacctca ggctgggtt acatgcactg ctgctcaac ccgtgctct atgctttgt aggggtcaag ttccgggagc ggtgtggtat gctgtcttt cgcctgggt gcccaccca gagagggtc gagaggcagc catgtcttc ccgcgggat tcactgtgt ctgagacctc agaggctcc tactgggt tactcggtc ggtgagcgg gaatcgggc tccccctg cccacagtct gacttccc cttccaggc tctccctcc ctctgcgc tctggctctc cccaatctc tgcctccgg gactcactgg cagccccc caccacaggt ctccgggaa gccacctcc cagctctgag gactgcacca ttgtgtctc ttactgtcca agccccatcc tgccggccga ggtggctgcc tggagcccca ctgcctctct catttgaaa ctaaaaactc atcttccca agtgcgggga gtacaaggca tggcgtagat ggtgctgcc catgaagcca cagccaggc ctccagctca gcagtgtgt tggccatggt ccccaagacc tctatattg ctctttatt ttatgtcta aaactctgt taaaacttt caataacaa gatcgtcagg accaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa mvlevsdhqv lndaevalll enfsssydyg enesdsccsts pcpqdfsln fdraftpaly p slflflllg ngavaavlls rrtalsstdt flhlavadt llvltplwa vdaavqvfeg sgclkvagal fninfyagal llacisfdry lniivhatoly rrgpparvlt tclavwglcl lfalpdelfl sahderlna thcqynfpqv gtrtlrvlql vagflpllv maycyahila vllvsrgqrr lrarmlvvv vvaalcwtp yhlvvlvdl mdlgalarnc gresrvdvak svtslglymh cclnpllyaf vgkfrermw mllrlgcpn qrglqrqps srrdsswset seasygsl </p>	Homo sapiens
75	CXC	NM_003467	<p> gttgttggc tgcggcagca ggtagcaag tgacgccag ggcctgagt ctccagtgc a caccgatct ggagaaccag cggttaccat ggaggggatc agtatataca ctccagataa ctacaccag gaaatgggt caggggacta tgactccatg aaggaaacct gtttccgtga agaaatgct aattcaata aaatcttct gccaccatc tactccatca tcttctaac tggcattgt ggcaatggat tggctactct ggtcactgtg taccagaaga aactgagaag catgacggac aagtacaggc tgcacctgtc agtgccgac ctctctttt tcatacgt tcccttctg gcagttgat cgtgggcaa ctggtacttt ggaaacttcc tatgcaaggc agtccatgtc atctacacag tcaacctta cagcagtgc ctcatctgg ccttcatcag tctggaccgc tactggcca tcttccagc caccacagt cagagcccaa ggaagctgtt ggctgaaaag gtggtctatg ttggcgtctg gactctgc ctctgctga ctattccga ctctatctt gccaaogtca gtgaggcaga tgacagatat atctgtgacc gcttaccac caatgacttg tgggtggttg tgtccagtt tcagacatc atggttgcc ttactctgccc tggatattgc atctgtctt gctattgcat taccatctc agctgtcac actccaggg ccaccagaag cgaaggccc tcaagaccac agtcatctc atctggctt tcttgcctg </p>	Homo sapiens

[illegible]

78	755	Complement Component 3a Receptor 1	NP_004045.1	<p>atgtctctag catctgcca tagttgcttt aatcccttc tttatgccct cttggggaaa gatttagga agaaagcaag gcagtcatt cagggaattc tggaggcagc cttcagtgag gagctcacac gttccaccca ctgtccctca aacaatgtca tttcagaag aatatgaca actgtgtga</p> <p>TDLLSQPWE PPVILSMVIL SLTELLGLPG NGLVLWVAGL KMORTVNTIW P FLHLTLADLL CCLSLPFLSLA HLAQGGWPY GRFLCKLIPS IIVLNNFASV FLTLAISLDR CLVFRPIWC QNHRNVGNAC SICGIIWVA FVMCIPVFVY REIFTDNNH RCGYKFGLS SLDYPDFYGD PLENRSLENI VORPEMNDP LDPSEFQTN HPWTVPVTFQ PQTFRPSAD SLPRGSARLT SQNLYSNVFK PADVSPKIP SGPIEDHET SPLDSDAFL STHLKLPSA SSNSFYESEL PQGFQDYNL GQTFDDQVP TPVVAITIR IUVGFLLPSV IMIACYSFIV FRMQRGFEAK SQSKTRFVAV VVAVFLVCW TPYHIFGVLS LLTDPETPLG KTIMSWDHVC IALASANSCT NPELYALLGK DFRKKARQSI QGILEAAAFSE ELTRSTHCPN NNVISERNST TV</p>	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	<p>agggggagcc caggagacca gaacatgaac tcttcaatt ataccacccc tgattatggg A cactatgatg acaaggatac cctggacctc aacacccctg tggataaac ttctaacacg ctgcgtgttc cagacatcct ggccttggtc atctttgag tctgtctcct ggtgggagtg ctgggcaatg cctcgtgtgtt ctgggtgacg gcattcgag ccaagcggac catcaatgcc atctggttcc tcaacttggc gtagccgac tctctctcct gcttggtcgt gccatcttgg ttcacgtcca ttgtacagca tcaaccactg ccttttggcg gggccgctg cagcatcctg ccctccctca tctgtctcaa catgtacgcc agcatcctgc tcttgccac catcagcgcc gaccgtttc tctgtgtgtt taaccctc tggcgacaga acttcogagg ggcgggttg gcctggatcg cctgtgcgt gcttgggtt ttagccctgc tctgacct accctcctc ctgtaccggg tggccggga ggagtacttt ccacaaaagg tgttgggtg cgtggactac agccacgaca aacggggga gcgagccgtg gccatcctgc gcttggtcct ggcctcctg tggcctctac tcaagctcac gattgttac acttctatcc tgcctcggac gtggagcgc agggccacgc ggtccaccaa gacactcaag gtgtgggtg cagtgtggc cagtttctt atcttctggt tgccttaca ggtgacggg ataagatgt ccttctgga gccatcgtca ccaccttcc tgcgtctgaa taagctggac tctctgtg tctccttgc ctacataac tgctgcatca acccctcat ctactgtgtg gcggccagg gcttcaggg ccgactgagg aaatccctcc ccagcctcct ccggaacgtg ttgactgaag agtccgtgt tagggagagc aagtcattca cgcctccac agtgacact atggccaga agaccaggc agtgtaggag acagcctcat gggccactgt ggcctcgtt cccctcctt cccggcatt cctcctctg ttttcactt actttctgt gtaggtgtt accttagcta actaactct cctcatgttg cctgtcttc ccagactgt cctccttctt ccaggggac tcttctatc ctctcctt tgcaaggtga acacttctt ctaggagca cctccacc cccaccccc cccacacac catcttcca tccaggctt ttgaaaaa aacagaaacc cgtgtatctg ggtatattcc atatggcaat aggtgtgac aggaactca gaatacagac aagtagaaag attctgctt aaaaaaatgt attatttta tggcaagtgt gaaaatagt aactggaatc tcaaaagtcc tttgggacaa acagaagtc catggagta tctaagctct tgaagtgtg ttaattttaa aaagaaaatt aggtgagag cagtggctca cgcctgtaat cccagactt tgggaggcta aggtgggtgg atcacctgag gtaagagtt ccagaccagg ctggccagca tggtagaac</p>	Homo sapiens

Homo sapiens

NP_001727.1

Component 5a

Receptor 1

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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ccgtctgtac taaaaatata aaaaattaac tgggaatggt agtgggtggt tgtaatcccc
gctacttggg aggtctaggt gggagaattg ctggaacctt ggagtgagg gttgtgtga
gcatatgac caccactgca ctctagcttg ggtgacgag ggaggtcttg totcaaaagc
aaagcaaaa caaaacaaa aacactaaa aacctgcag tttgtttgt acttgtttt
taaatatgc ttctatttt gagatcattg caaactaac acaatgtaa gtaatgatac
agagggatct tgtgtacct gcaccagcc tccccaatg gcaacatctt gcaaaactac
aatgtagtct cataaccagg atattgacat tgatacagt aagatacagg acattctcat
caccacagg atccccagga tgcocacttc cctccacccc cacaccacag cagtgtccct
aacccctggc accagggaat ccaacttcca ttctataat gttgtcattt caagaatggt
attcaatgga atcatatagt atgtaacctg ttttgagctt aaaaaaaa gatacatga
ctttaaagag gaaaataaaa atgaatattg aaaaaaaa ctttagag
VTAFAKRTI NAIFELNLAV ADELSCALP ILFTSIVQHH HWPEGGACCS ILPSLILNM
YASILLIATI SADRELLVFK PIMCONFRA GLAWIACAVA WGLALITIP SFLYRVVREE
YFPKVLGV DYSHDKRRER AVAIVRLVGL FLWPLTLTI CYTFILLRTW SRATRSKNT
LKWVAVVAS FFIFWLPYQV TGINMSFLEP SSPTFLLINK LDSLCVSFAY INCCINPLIY
VWAGQGFQGR LRKSLPSLLR NVLTEESVVR ESKSFRTSTV DTMQKTOAV
gacgagggga acaactctc tctctscagc agagagtgtc acctctgctt ttaggacctt A
caagctctgc taactgaatc taactctaat tgcagatca cattgcaaat ctttcaactct
ttcccaacctt gctgtgtggt aaactcttcc tgcggatctt cagaaagtaa agttccatcc
tgagaatatt tcacaaagaa ttctcttaag agctggactg ggtcttgacc cctggaaatt
aagaaattct taagacaat gtcaaatatg atccaagaga aaatgtgatt tgagtctgga
gcaaatgtg catatgctt aataataaaa accatacta gctatagaa acaaatatt
gaataataaa aaccatact agcctataga aacaatatt tgaagagatt ctaccactaa
aaagaaaact actacaactt gacaagactg ctgcaactt caattgggtca ccacaacttg
acaaggttgc tataaaaca gattgotaca actctagtt tatgtttatc agcatattc
atttgggtt aatgatggag aaaaagtga cctgtattt tctgtttctc ttgcttttt
ttatgattct tgttacagca gaattagaag agagtcttga ggactcaatt cagtgggag
ttactagaaa taaatcatg acagctcaat atgaatgta ccaaaagatt atgcaagacc
ccattcaaca agcagaaggc gtttactgca acagaacctg ggatggatgg ctctgctgga
agatgttgc agcaggaact gaatcaatgc agctctgccc tgattacttt caggactttg
atccatcaga aaaagttaaa agatctgtg accaagtgg aactgggtt agcatccag
caagcaacag acaatggaca aattatccc agtgaatgt taacaccac gagaaagtga
agactgcaat aatttgttt tactgacca taattggaca cggattgtct attgcatcac
tgottatctc gctggcata ttcttttatt tcaagagcct aagttgcaa aggtattact
tacacaaaaa tctgttcttc tcattgttt gtaactctgt tgtaacatc attcacctca
ctgcagtgcc caacaaccag gccttagtag ccacaaatcc tgttagttgc aaagtgtccc
agttcattca tctttacctg atgggctgta attactttg gatgctctgt gaaggcattt
acctacacac actcattgtg gtggcgtgt ttgcagagaa gcaacattta atgtgttatt
atttcttgg ctggggattt ccactgattc ctgctgttat acatgccatt gctagaagct
tatattacaa tgacaattgc tggatcagtt ctgataccca tctcctctac attatccatg

Homo sapiens

NP_001727.1

Component 5a

Receptor 1

758

80

Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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Calcitonin Receptor-like Receptor

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82	767	Calcitonin Receptor- like Receptor	NP_005786.1	MEKKCTLYFL VLPFFMTLV TAELEESPED SIQLGVTRNK IMTAQECYQ KIMQDPIQQA P EGVYCNRTWD GMLCWNVDVA GTESMQLCPD YFQDFPSEK VTKICDDGN WFRHPASNRT WTNYTQCNVN THEKVKTALN LFYLTIIHG LSIASLLISL GIFFYFKSL SQRITLHKNL FFSFVCNSW TIIHLTAVAN NQALVATNPV SKVSOFIHL YLMGCNPFMM LCEGIYLTIL IVWVFAEKQ HLMWYFELGW GFPLIPACIH AARSLYND NCWISSDTHL LYIHPICA ALLVNLFFLL NIVRVLTFL KVTQAESNL YMKAVRATLI LVPLLGIEFV LIPWRPEGI AEEVDYIMH ILMHFQGLV STIFCFENGE VQAILRRNWN QYKIQFNSF SNSEALRSAS YTVSTISDGP GYSHDCPSEH LNGRSIHIE NVLLPENLY N	Homo sapiens
83	832	Cannabinoid Receptor 1	NM_001840	gccccatttg tgctgcttta ctggfgaato ttttttctt gtaaatatt gtacgcgttc tcatcaca gtaaaagt acacacca ggaatccaa tctgtacatg aaagctgtga gagctactct tatcttggtg ccattgcttg gcaatgaatt tgtgtgatt ccattggagc ctgaaggaaa gattgcagag gagtatatg actacatcat gcacatcctt atgcacttcc agggtctttt ggtctctacc atttctgct tctttaatgg agaggttcaa gcaattctga gaagaaactg gaataatac aaaaatccat ttggaacag ctttccaac tcagaagctc ttcgtagtgc gctttacaca gtgtcaaca tcatgtatgg tccaggttat agtcatgact gtcctagtga acacttaaat ggaagaagca tccatgatat tgaaaatggt ctttcaaac cagaaaattt atataattga aatagaagg atggtgtgct cactgtttgg tgcttctct aactcaagga ctggaccoca tgaactgtga gcaagaagc tcaatatta aatgacttgy gggaatgta taaagaagag ccttcacatg aaattagtag tgtgtgata agagtgaac atccagctct atgtgggaaa aaagaaatcc tggttgtgaa tgttgcag taaatactcc cactatgctt gatgtgagc tactaacctg acatcacca gtgtggaatt ggagaaagc acaataaact tttctgagct ggtgtaagcc agttccagca caccattgat gaattcaaac aaatggctgt aaactaaac atacatgttg gcatgattc taccctatt cscaccaaga gacctagtca agtctataa acatgaagg aaaattagct tttagttta aaactcttta tcccatcttg atggggcag ttgcctttt tttttccca gagtgcgta gtcctttttg taactacct ctcaaatgga caataccaga agtgaattat cctgtgtggc tttctttct ctatgaaaag caactgagta caattgtat gatcactca tttgtgaca catcagttat atctgtggc atatccattg tggaactgg atgaacagga tgtataat gcaatcttac ttctatatca ttaggaaaac atctagtgt atgtacaaa acactgtgc aaccttcc tgtcttacca aacagtggga ggaattcct agctgtaaat ataaatttg ccttccatt tctactgtat aacaaaatta gcaatcatt tatataaga aaatcaatga aggatttctt atcttctgg aatttgtta aagaataat tgaaaatga gcttgtaaat actccattat tttattttat agtctcaaat caatacata caactatgt aatttttaa gcaaatatat aatgcaaca tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataa aatagagctt ggaatgct	Homo sapiens

84	Cannabinoid Receptor 1	NP_001831.1	<p> caggtgagag caggtgagag ttacagaatt ttacagaag tctctctgt ccttcaagga gaatgagag aacatccagt gtggggagaa ctteatggac atagatgtt tcatgtctt gaaccagc cagcagctgg ccattgcagt cctgccctc acgtgggca ccttcaaggt cctggagaac ctctctgtgc tbtgcgtcat cctccactcc cgcagcctcc gctgcaggcc ttctaccac ttcatcgga gctggcggt ggcagacctc ctgggagtg tcatttttgt ctacagctt attgacttcc acgtgttcca ccgcaaatg agcgcgaacg tgtttctgtt caactgggt ggggtcacgg cctcttccac tgcctcctg ggcagcctgt tctccacagc catcgacagg tacatatcca ttacacagcc cctggcctat aagagattg tcaccagcc caaggccgtg gtggcggtttt gctgatgtg gaccatagcc attgtgacg ccgtgctgcc tctctgggc tggaaactgg agaaactgca atctgtttgc tcagacattt tccacacat tgatgaacc tacctgatgt ttggatcgg ggtccaccg tctctgttc tgttcatcgt gtatgcgtac atgtatatc tctggaaggc tcacagccac gccgtccgca tgaatcagcg tggcaccag aagagcata tcatccacac gctgaggtat gggaaggtac aggtgacccg gccagacaa gccgcagtg acattagtt agccaagacc ctggtctga tctgtgtgt gttgatcac tctgtgggccc ctctgcttgc aatcatgtg tatgatgtct ttgggaagat gaacaagctc attaagacgg tgtttgcatt ctgcagtatg ctctgctgc tgaactccac cgtgaacccc atcatctatg cctgagggag taaggacctg cgacacgctt tccggagcat gttccctct tbtgaaggca ctgcgagcc tctgataaac agcatggggg actcgactg cctgcacaaa cagcaaaaca atgcagccag ttttcaacag gccgcagaaa gctgcatcaa gagcagctc aagattgcca agttaacct gctgtgtcc acagacacgt ctgccgagcc tctgtgagcc tgatgcctcc ctggcagcac aggaagaaga tttttttt taagctcaaa atctagaaga gctattgtc tcttgggta ttttttta actttaccat gctcaatgaa aagtgattg ccacatgtca cttattgtct tagtttccgt ttgggctaact ctccgggggt tctgaggaaa ccttt </p>	Homo sapiens
832	Cannabinoid Receptor 2	NM_001841	<p> KMTAGDNPQL VRADQVNITE FYNKSLSEK ENEENTCGE NFMDIECFMV LNPSQQLAIA VLSLTIGTFT VLENLLVLCV ILHRSRLRCR PSYHFTGSIA VADLLGSVIF VYSFIDFHFV HRKDSRNVEL FKLGGVTAIF TASVGSLELT AIDRYISIRH PLAYKRIVTR PRXAWAFCLM WTIAIVIAVL PLGWNCEKL QSVCSDFPH IDETYLMEWI GVTSVLLFI VYAYMYILWK AHSHAVRMIO RGTQKSIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPIL AIMVYDVFGK MNKLIKTVFA FCSMLCLLNS TWPITIALR SKDLRHAIRS MPSCCEGTAQ PLDNSMGDSD CLHKHANNAA SVHRAAESCI KSTVXIAKVT MSVSTDTSAE AL caggtcctgg gagaggacag aaaaacactg gactctcag cccccgcag ctccagtgac A ccagccacc acacacaa ccaagcctt ctacacaagc tcaatggaat ctgaaggcc caccctatgg aggaatgctg ggtgacagag atagccaatg gctccaagga tggcttggtat tccaaaccta tgaaggatta catgatcctg agtggcccc agaagacagc tgttctgtg ttgtgactc ttctgggccc gctaagtgcc ctggagaacg tggctgtgct ctatctgac ctgtcctccc accaactccg ccggaagccc tcatactgt tcaattggcag ctggctggg gctgacttcc tggccagtggt ggtctttgca tgcagctttg tgaatttcca tgttttccat ggtgtggatt ccaaggctgt ctctctgctg aagattggca gcgtgactat gaccttccac gctctgtggt gtagcctcct gctgaccgcc attgaccgat acctctgct gcgtatcca </p>	Homo sapiens

86	Cannabinoid Receptor 2	NP_001832.1	MEECWVTEIA	NGSDGLDSN	PMKDYMLSG	PQKTAVALC	TLGLLSALE	NVALYLILS	P	Homo sapiens
			gctctctcag	aagctctgct	caccgttgga	agggcaactgg	tgaccctggg	catcatgtgg		
			gtcctctcag	cactagtctc	ctacctgccc	ctcatgggat	ggacttgctg	tcocaggccc		
			tgtctgagc	tttcccaact	gactcccaat	gactaactgc	tgagctggct	ctgtgtcacc		
			gcttccctct	tttccgggaat	catctacacc	tatgggcattg	ttctctggaa	ggcccatcag		
			catgtggcca	gcttgtctgg	ccaccaggac	aggcaggtgc	caggaatggc	cgaataggg		
			ctggatgtga	ggttggccaa	gacctaggg	ctagtgttg	ctgtgtctct	catctgttgg		
			ttcccaatgc	tgccctcat	ggccacacgc	ctggccacta	cgctcagtga	caggttcaag		
			aaggcccttg	cttcttgctc	catgctgtgc	ctcataaact	ccatggtcaa	ccctgtcacc		
			tatgctctac	ggagtggaga	gacccgctcc	ttctgcccac	actgcccggc	tcactggaag		
			aagtgtgtga	ggggcccttg	gtcagaggca	aaagaagaag	ccccgagatc	ctcagtcacc		
			gagacagagg	ctgatgggaa	aatactccg	tgcccaagatt	ccagagatct	agacctctct		
			gattgtgat	gaggccctct	cccaatttaa	acaactcaag	tcagaaatca	gttcaactccc		
			tggaagagag	agagggtct	tggaactctc	ttcttactta	aaccagtccc	agacacctag		
			acacggaccc	ctttttgctg	atgagtgttg	ggactgactc	ctggaagaca	gcctggcctt		
			gcccacctgc	acacagtctg	ttggataggt	agggccacga	ggagttagca	ggtaggcgag		
			acacaaaaag	gacctgggaca	gggtcagtag	aagtcaggac	aggcttcatg	cttgcatact		
			ccagagacca	ccaggagcca	aagcagacct	ccaggccacg	caatgaggga	cttggggagaa		
			atctgagaag	aatgggttgt	ttcttggga	agtcagggtg	tcagatggga	tggacatcca		
			ggctctctct	ctgcctaatt	gtcaaggcct	cttgggtctc	ggagtatga	aaggccccac		
			tttcaagtca	cccttggcac	tgaggaccga	ggactatgct	atgatgagg	ttaagggtgt		
			gacttgctct	tttcagagat	aaatgacaag	ctctca				
87	Leukocyte Antigen CD97	NM_001784	SHQLRRRPSY	LFITGSLAGAD	FLASVVFACS	FWNFHFHGV	DSKAVFLKI	GSVTMTFTAS		
			VGSLLLTPNDY	RYLCRLRPPS	YKALLTRGRA	IVTLGIMWVL	SALVSYLPLM	GMTCCPRPCS		
			ELFPLIPNDY	LLSWLLFIAT	LFSGIITYTG	HVLWKAHQHV	ASLSGHQDRQ	VPGWARMRLD		
			VRLAKTLGIV	LAVLLICWFP	VLALMAHSLA	TTLSDOVKKA	FAFCSMLCLI	NSMWNPIYA		
			LRSGEIRSSA	HHCIAHWKRC	VRGLGSEAKE	EAPRSSVTET	EADGKIIPWP	DSRDLDLSDC		
			agcctgttga	gacgggacag	ccctgtccca	ctcactcttt	ccctgcgcgc	tcctgcgcgc	A	
			agctcccaacc	atgggagcc	gcgtctttct	cgcatctgtg	gtctggttga	ctctgcgcgc		
			agctgaaaacc	caggactcca	ggggtgtgtg	ccggtgtgtg	cttcagaaact	ctcgtgtgtg		
			caatgccacc	gcctgtcgt	gcaatccagg	gttcagctct	ttttctgaga	tcataccacc		
			cccgacggag	actgttgacg	acatacaaga	gtgtgaaca	ccgtcgaaaag	tgtcatgcgc		
			aaaaattctcg	gactgttga	acacagaggg	gagctacgac	tgcgtgtgca	gcccgggata		
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			gggttcatac	agctgcgcgt	gcgcgccagg	ctggaagccc	agacacggaa	tcocgaataa		
			ccaaaaggac	actgtctgtg	aagatatgac	tttctccacc	tggaccgcgc	cccttggagt		
			ccacagccag	acgttttccc	gatttttcca	caaatgtccag	gacctgggca	gagactccaa		
			gacaagctca	gccgaggtca	ccatccagaa	tgtcatcaaa	tgggtggatg	aactgatgga		
			agctctctgga	gacgtagagg	ccctggcgcc	acctgtcccg	cacctcatag	ccaccacgt		
			gctctcaaac	cttgaagata	tcatgaggat	ccctggcagaag	agcctgctca	aaggccctct		

88 922 Leukocyte. NP_001775.1 MGRVFLAFC VWTLPGAET QDSRCARWC QNSCCVNAT ACRCNPGFSS FSEIITTTTE P Homo sapiens
 Antigen CD97 SSGQHQCDSS TVCFNTVGSY SCRCRPGWKP RHGIPNNQKD TVCEDMTFST WTTPPGVHSQ
 TLSRFFDKVQ DLGRDSKTS AEVTIQNVIK IVDELMEAPQ DVEALAPPVR HLIATQLLSN
 LEDIMRILAK SLPGPFTYI SPNTELTLM IQERGDKNVT MGQSSARMKL NWAVAAGAE
 PPAVAGILS IQNMTLLAN ASLNLHKKQ AELEIYEYS IRGVQLRLS AVNSIFLSH
 cacctacatt tcccttcga acacagagct gacctgatg atccaggagc ggggggacaa gggcagctgg
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 TCDDINECAT PSKVCCKFS DWNTEGSYD CVCSPEPEPV SGAKTFFNES ENTCDVDEC
 SSGQHQCDSS TVCFNTVGSY SCRCRPGWKP RHGIPNNQKD TVCEDMTFST WTTPPGVHSQ
 TLSRFFDKVQ DLGRDSKTS AEVTIQNVIK IVDELMEAPQ DVEALAPPVR HLIATQLLSN
 LEDIMRILAK SLPGPFTYI SPNTELTLM IQERGDKNVT MGQSSARMKL NWAVAAGAE
 PPAVAGILS IQNMTLLAN ASLNLHKKQ AELEIYEYS IRGVQLRLS AVNSIFLSH

89	941	EMR1 Hormone NM_001974 Receptor	NTKELNSPIL FAFSHLESSD GEAGRDPPAK DVMGPRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TQCCSHLSSE TILMAHYDVE DWKITLITRV GLALSFCIL ICILFELLVR PIQSRRTIH IHLICICLVFG STIFLAGIEN EGGQVGLRCR LVAGLHYCF LA AFCWMSLE GLELYFLVVR VFQGGGLSTR WLCLIGYGVF LLIVGVSAAI YSKGYGRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TWKLTQKES EINFDMKKLK KARALYTITAI AOLFLIGCTW VFGLFIFDDR SILVTYVFTI LNCIQAFY LLHCLLNKKV REEYRKWACL VAGGSKYSEF TSTSTGTHN QTRALRASES GI	ctaaagtgtt ttctttgaa tgacagaact acagcataat gctgtgcttc aacctgctcc A tcctctgggg atgtttggtt atgcacagct ggaaggga cacaagacc acacggaac caaacacaa gggtaataac tgtagagaca gtacctgtg cccagttat gccacttga ccaatcgggt ggacagttac tattgcactt gcaacaagg ctctctgtcc agcaatgggc aaaatcactt caaggatcca gtagtgcat gaaagatat tgatgaatgt tctcaagcc cccagccctg tggctcctaac tcctctgtga aaacctgtc agggaggtac aagtgcagct gtttagatgg ttctcttct cccactggaa atgactgggt cccaggaaag ccgggcaatt tctctgttac tgatataat gagtgctca cagcaggggt ctgcccgtg cattctgact gtgtcaactc catgggaagc tacagttgca gctgtcaagt tggattcatc tctagaaact ccacctgtga agacgtgat gaatgtgcag atccaagagc ttgccagag catgcaactt gtaatacac tgttggaac tactctgtt tctgcaacc aggtttgaa tccagcagtg gccacttgag ttgcccaggt ctcaagcat cgttggaaga tattgtgaa tgcactgaa tgtgcccact caattcaaca tgcaccaaca ctctctggag ctacttttg acctgccacc ctggcttgc accaagcagt ggacagttga attcacaga ccaaggagtg gaatgtagag atattgatga gtgcgcacaa gatccatcaa ctgtgtgtcc taattctatc tgcaccaatg ccctgggctc ctacagctgt gctgtcattg taggttttca tcccaatcca gaaggctccc agaaagatgg caacttcagc tggcacaagg ttctcttcaa atgtaaggaa gatgtgatac cggataataa gcagatccag caatgccaa ggggaaccgc agtgaaccc gcataatgtc ctttttgtgc acaataaat aacatcttca gcttcttga caaagtgtgt gaaataaaa cgaccgtagt ttctctgaag aatacaactg agactttgt cctgtgtgtt aaacaaatat ccatgtggac taaattcacc aaggaagaga cgtctctcct ggccacagtc ttctggaga gtgtggaag catgacactg gcattctttt ggaaccctc agcaaatgtc actccgctg ttcgggcgga atacttagac attgagagca agttatcaa caaagatgc agtgaagaga atgtgacgtt ggacttggtg gcaaggggg ataagatgaa gatcgggtgt tccacaattg aggaatctga atccacagag accactgggt tggcttttgt ctctttgtg ggcattggaat cggttttaa tgaagccttc ttcaagacc accagctcc cttagaccac tctgagatca agctgaagat gaattctga gtctttggg gcataatgac tggagagaag aaagacggct tctcagatcc aatctctac actctggaga agttcagcc aaagcagaag tttgagaggc ccatctgtgt ttctggagc actgatgtga aggttggaag atggacatcc ttggctgtg tgatcctgga agcttctgag acatatacca tctgagctg taatcagatg gcaaatcttg ccgttatcat ggcgtctggg gagctcaga tggacttttc ctgtacatc attagccatg taggcattat catctccttg gtgtgcctcg tcttggccat cgccaccttt ctgctgtgtc gtcccatccg aaatcacac accctacctc acctgacct ctgctgtgtg ctctctgtg cgaagactct ctctctgoc ggtatacaca agactgaca caagcgggc tgcgccatca	Homo sapiens
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941	EMR1 Hormone NP_001965.1	MRGNLLFW	GCVMHSEW	HRPTRKPT	KGNCRDSTL	CPVATCTNT	VDSYYCTCKQ	P	Homo sapiens
	Receptor	VFLLSNQNH	FDPGVRCND	IDCSQSPQ	CGPNSSCKNL	SGRYKCSCLD	GFSSPTGNDW		
		VPKPGNFSC	TDINECLTSR	VCEHSDCVN	SMGSYSCSQ	VGFTSRNSTC	EDVNECADPR		
		ACPEHATCEN	TVGNYSFCFN	PGFESSGHL	SCQGLKASCE	DIDCEMCP	INSTCNTPG		
		SYFCTCHPGF	APSSGQLNFT	DQGVCECRDID	ECRODPSTCG	PNSTCTNALG	SYSCGCIYGF		
		HNPEGSQKD	GNFSCQVLF	KCKEDVIPDN	KQIQCCQEGT	AVKPAYVSFC	AQIINIFSVL		
		DKVCENKTV	VSLKNTTESF	VPVLKQISMW	TKFTKEETSS	LATVFLESVE	SMTLASFVKP		
		SANVTPAVRA	EYLDIESKVI	NKECSEENV	LDLVAKGDKM	KIGCSTIEES	ESTETTGVAF		
		VSVFGMESVL	NERFFQDHQA	PLTSEIKLK	MNSRVVGGIM	TGEKDKGFSD	PIIYTIENVQ		
		PKQFERPIC	VSWSTDVXGG	RWTSFGCVIL	EASETYTCIS	CNQMANLAVI	MSEGLTMDF		
		SLYIISHVGI	IISLVCLVLA	IATFLCRSI	RNHTYTLHLH	LCVCLLLAKT	LFLAGHKTD		
		NKTGCAIAG	FLHYLFACF	FWMLVEAVIL	FLMVRLKVV	NYFSSRNIMK	LHICAFGYGL		
		PMLVVVISAS	VQFQGYGMHN	RCWLNTETGF	IWSFLGPVCT	VIVINSLLLT	WTLWLRQRL		
		SSVNAEVSTL	KDTRLTLTFA	FAQLFILGCS	WVLGIFQIGP	VAGVMAYLFT	IINSLQAFI		
		FLIHCLLNGQ	VREYKRWIT	GKTKPSSQSQ	TSRILLSSMP	SASKTG			
965	G Protein-Coupled Receptor GPR30	NP_001505	GGAAACGAC	ACCTAGAAGT	AGGAGTGAGA	TTCGCTGAAG	TTCCTCTG	AGGAAGACCC	A
			ACCCCTCCG	CTGGAGAGC	GGGGCTGGC	GTGCTGAGG	ACCCCTCG	CTGGAGAGC	
			CCAGCGGGC	TTGGGGGGC	TGCTCTGCC	CTCATGGGC	GGCATCGGT	TCCCGAAGC	
			GCGAGTGAA	ATTCAAAAG	CCAGTAGGG	GGCATCGG	AAGTGGCGC	CCGCGATGAG	
			GCAATTGAG	GGCCCCGAG	GTCCGGGGG	GGAGTATT	TCTCCGCTG	CACGAGACTG	
			TGAAATCCG	AACCATGAG	AGGAGAGCG	GGCTGGTGG	GGAGAGGCC	ACCAACATC	
			GGACGGCAG	TACCCAGAG	GTAGCAGCT	CCACGCGGA	CTGGCGCAG	TGGCGGACAC	

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tcatgtcgg atcctt

93	Coupled Receptor GPR30	978	Cholecystoki nin A Receptor	NP_000730	<p> LSCLYTIFFL PIGFVGNILI LVNISFREK MTIPDLYFIN LAVADLILVA DSLIEVFNLH ERYDIAVLIC TMSFLQVN MYSSVFFLTW MSFDRIYALA RAMRCSLEPT KKHARLSOGL IWMASVSATL VPTAVHLQH TDEACFCFAD VREVQWLEVT LGFIVPEFALI GLCYSLIVRV LVRAHRHRLG RPRRQKALRM ILAVLVVFFV CWLPENVFIS VHLQRTQPG AAPCKQSPFH AHPLTGHIVN LAAFNSNCLN PLIYSFLGET FRDKRLIYIE QKTNLPALNR FCHAALKRAVI PDSTEQSDVR FSSAV ggaatggctg aaaaagccca cacctggaaa tcactccctc cctgctctc cagggcaggt A tgcattctcg agacgcttcg gtcattagag gaatggccg ggagtggagc attcaccagc tctccagcac ttggtggaaa gcagcaggca aggatggatg tgggtgacag cettcttctg aatgggaagca acatcacctc tccctgtgaa ctggtgctcg aaaatgagac gctttcttgc ttggatcagc cccgtccctc caaagagtgg cagcagcggg tgcagattct cttgtactcc ttgatattcc tgcacagct gctgggaaac acgctgtca tcaccgtgct gattcggaac aagcggatgc ggacgggtcac caacatcttc ctctctccc tggctgtcag cgacctcatg ctctgtctct tctgcatgac gttcaacctc atcccacatc tgcacaagga ttcatctctc gggagcggcg ttgtcaagac caccacctac ttcattgggca cctctgtgag tgtatctacc tttaattctg tagccatctc tctagagaga tatggtgcga ttgcaaac cttacagctc cgggtctggc agacaaaac ccatgctttg aagtgattg ctgctacctg gtgcctttcc ttaccatca tgaactccgta cccatttat agcaactgg tgccttttac caaaaataac aaccagaccg gaaatatgtg ccgttttcta ctgcaaatg atgttatgca gaagctctgg cacacattcc tgttactcat cctcttctt attcctggaa ttgtgatgat ggtggcatat ggattaatct ctttggaaact ctaccaggga ataaaattg aggtagcca gaagaagtct gctaaagaaa ggaacacctag caccaccagc agcggaat atgaggacag cgtatgggtg tacctgcaaa agaccaggcc cccgagggaag ctggagctcc ggcagctgtc caccggcagc agcagcaggc ccaaccgcat ccggagtaac agctccgag ccaacctgat ggcaagaaa aggtgatccc gcatgctcat cgtcatctg tctctctct tctgtgctg gatgccatc ttacagcgca acgctggcg ggctacgac accgctccg cagagcgcg cctctcagga acccccatct ccttcatct cctcctgtcc tacacctct cctgctcaa cccatcctc tactgcttca tgaacaaaag cttccgctc ggcttcatg ccaccttccc ctgctgccc aatcctggtc cccaggggc gagggagag gtggggaggg aggaggaagg cgggaccaca ggagcctctc tgtccaggtt ctgtacagc catatagtg cctcgtgccc acccagtga gatgtccctc gacctccac cgcagaagga aggcaggag gaggcagaga agaaagaacg gaagaagaga tcaggaagag aaggagcaga gcagagctga tggagaagga aggtccatc tccagtgga actcttcaag gtctcttctc atcttctc tgattccaga gcactgctcc agtggggcca tgaattggtt ctaggcaggt caaagcagga tatgttaagt acaactcaac catcag </p>	sapiens
94	Cholecystoki nin A Receptor	978	Cholecystoki nin A Receptor	NP_000721.1	<p> MDVVDLILVN GSNITPPCEL GLENELFCL DQPRSKEMQ PAVQILLYSL IFLISVLGNT P LVITVLIRNK RMRVTNIFL LSLAVSDML CLFCMPFNLI PNLKDFIFG SAVCKTTTF MGTSSVSTF NLVAISLERY GAICKPLQSR VWQTKSHALK VIAATWCLSF TINTPYPIYS NLVFTKNNN QTANMCRFL PNDVMQSWH TFLLLIFLI PGIVMWAYG LISILEYQGI KFEASQKKA KERKPTTSS GKYEDSDGCV LQKTRPRKL ELRQLSTGSS SRANRIRNS SAANLMAKR VIRMLIVIV LFFLCWMPIF SANAWRAYDT ASAERLSGT PISFILLLSY </p>	Homo sapiens

95

1103 Corticotropin releasing factor Receptor 2

TSSCNPIIY CFMNRFRILG FMATFPCCPN PGPPGARGEV GEEEGGTTG ASLSRFSYSH
MSASVPPQ

atggacgagg cactgtcca cagctgctg gagccaact gcagcctggc gctggctgaa A
gagctgtctt tggacggctg ggggcaccc ctggacccc aggtcccta ctcctactgc
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agccaagggg gactgcaagg gacagggatg agtggggccc accaggtcca gcgcaaggag
aagcagaggg aattcacagg acccctgag aagagccag agcagagaag gacctgtcca
ccatccag cctctctgac caggcctta ctgggcccag agcagagaag gacctgtcca
acacacacag ctatttatag tagcacac aggtctccc tgcctactc atggagccag
cagccaggca atggtgtggc cctgcactgg ccttgagct ccacactcag tgggtgccc
cagttgggtg ggttaacgccc aagcaaaagg tcagtttggc tgcctatcc cagggtgtc
acctagagag gtcacttgt acccaccct gttcctgtgt cccctccca gccatccctc
ccgcttggg ggtccatga aggtgcagg ctccaggcc tggctctc tottgggaga
ccccctctt gctagtcca cagattagg aatcaaggaa gacgcataca ggaagccac
atccttagtc aaccagttgc atcgtgcgg gcaaatgag gagcagaggc atggaggagg
gagggctggg atgggaatag cagaaccacc atgtctctcag tgattgaac tcataccca
ttgccccttg cctccagtc tcccttcag aacatctct gctctctgtg aaataaacca
tgctctcttg

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96

1103 Corticotropin releasing factor

MDAALLHSL ENCSLALAE ELLLDGWGPP LDPEGYSYC NTTLDQIGTC WPSAAGALV P
ERPCEYFNG VKYNTTRAY RECLNGTWA SKINYQCEP ILDDKQRYD LHYRIALVN
YLGHCVSVAA LVAFLLFLA LRSIRCLRNV IHNLLITFI LRNVWFLQ LVDREHVESN

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97	1240	Dopamine Receptor D1	Receptor 2	<p> EWCHCITTI ENYFVVTNFF WMFEVGCYLH TAIVMTYST ERLRKCLFLFI GWCIPFPPIV AWAIGKLYYE NEQWFGKEP GDLVDYIYQG PILLVLLINE VFLFNIVRIL MTKLRASSTS ETIQYRKAVK ATILVLLPLLG IYTMLEFVNP GEDLSQIMF IYFNSFLOS QGFFVSFVYC FFNGEVS AV RKRWRWQDH HSLRVP MARA MSIPSPTRI SFHSIKQTAA V ggctcgctgc ctgcgcatgc cacaggctcc tgagaggtcg cgggcagtcg ctgctggggag A gcgcggggcc ctgctctctgta ggctgaag cgcccgagg ttcgcaagg ctctgggctc tcgaaaggaa gccaaagaaa gaagctgcc agtgaccag tccctggagt gctctctccc aaggaagctc cgagcgccca ggagccctta gccggggtct agtgccttt gaacaatctc cagctcttca aggaagtggg ctgcgcgcgc ctctcttgg accctggctg ggatcctttc cccaaacgca ccccgcgcat ttttgcgcac cgggagccga accctgctg cgcgcagctg gctgggctca ggcgcgcttc ctcaacgttt cggagccgct gccccagcg aagtcacat tccaaagctcc aggggctttg agagagacga ccccaaggca agcggtttgg agagctgctg aggagccagg ggcttggagg agcgagaaga catgtatttt cagctgagtc tcagaagggg agaatctct gtaccacca gaaagcaac agcccgaat tggtattgca actgactagc agagcagagg cccaggagtc actggattga tgatttagaa tatgtaaaa agccagtgtc ttatttgggg aattcagggg ctctctgggtg cccaagacag tgacctgag atgaggactc tgaacacctc tgccatggac gggactgggc tgggtgtgga gagggacttc tctgttctga tctcactgc ctgttctcta tgcgtgctca tccctgccac gctcctggg aacacgtggtg tctgtgctgc cgttateagg ttcgcacacc tgcgttccaa ggtgaccaac tctctgtca tctccttggc tgtgtcagat ctcttgggtg cagtcctggt catgccctgg aagcagtggtg ctgagattgc tggctcttgg cctcttgggt cctctgttaa catctgggtg gctcttgaca tcatgtgctc cactgcatcc atctcaacc tctgtgtgat cagcgtggag aggtattggg ctatctccag cctttccgg tatgagagaa agatgacccc caaggcagcc ttcactctga tcagtgtggc atggaccttg tctgtactca tctcttcat cccagtgcag ctccagctggc acaaggcaaa accacaaagc cctctgtatg gaaatgccac tccctggct gagaccatag acaactgtga ctccagctc agcaggacat atgcatctc atctctgtga ataatcttt acatccctgt gccatcatg attgtcacct acaccaggat ctacaggatt gctcagaac aaatacggcg cattggggc ttggagaggg cagcagtcga gcccaagaat tgccagacca ccacaggtaa tggaaagcct gtcatgttt ctcaaccgga agttctttt aagatgtcct tcaaaagaga aactaaagtc ctgaagactc tgcgtgtgat catgggtgtg tttgtgtgtc gttggctacc tttcttcatc ttgactgca ttttgcctt ctgtgggtct ggggagacgc agcccttctg cattgattcc aacaccttg acgtgttgtg tgggtttggg tgggctaatt catccttgaa cccatcatt tatgccttta atgctgattt tcggaaggca ttttcaagcc tcttaggatg ctacagactt tgcctgcga cgaataatgc catagagacy gtgagtatca ataacaatgg gccgcgatg ttttccagcc atcatagcc acgaggtccc atctccaagg agtgaatct ggtttacctg atccacatg ctgtgggctc ctctgaggac ctgaaaaagg aggaggcagc tggcatgccc agaccttgg agaagctgtc cccagcccta tgggtcatat tggactatga cactgacgtc tctctggaga agatccaacc catcacaaa aacggtcagc acccaacctg aactcgcaga tgaatctctg cacacatgct catcccaaaa gctagaggag attgctctgg ggtttgtctat taagaaacta aggtacgggt agactctgag gtgtcaggag agccctctgc tgcctttccaa cacacaatta actcgtttc caaatatatt ccagtgtatt </p>	Homo sapiens
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127/448

98	1240	Dopamine Receptor D1	NP_000785.1	<p> tctgtgttg, ttcatagtca atcaaacagg gacactacaa acatggggag ccataaggga catgtctttg gcttcagaat tgtttttaga aattttatct tatcttagga tttaccaaat agggcaaga atcaacagtg aacagcttca cttaaaaatca aattttcttg ggaagaaaaat gagatgggtt gattttgctg tatacaaca ggtgctaaca ctgttcccaag caaagttttc agattgtaaa gtaggtgca tgcctcata aatttttctt aaacatttaa ttgaggctta cagtaggagt gagaatttt tttccagaat tgagagatgt tttgttgata ttggttctat ttatttttg tatatatga ttttttaaat ttatgatata ataatatat atttatcata tttaatatga taaattaatg agttttatcc aagaccttac aaccacattt ctggccattt aactagcact ttataagcca atgaagcaaa cacacagact ctgtgagatt cttaatgttc atgtgtaact tctaga FFVLSLAVSD LTVAVLMPW KAVAEIAGFW PFGSFCNIWV AFDIMCTAS ILNLCVISVD RYWAISPPER YERKMPKAA FILISVAVTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA ETIDNCDSLL SRTYAISVV ISFYIPVAIM IVTYTRIYRI AQQIRIRIAA LERAAVHAKN CQTTGNGKP VECSPRESSF KMSFKRETKV LKTLISVIMGV FVCCWLPPFFI LNCILPFCGS GETQPFCDIS NTFDFVFWFG WANSLSNPII YAFNADFRKA ESTLIGCYRL CPATNNAIET VSINNNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSED LKKEEAAGIA RPLEKLSPAL SVILDYDIDV SLEKIQPITO NQOHPT ggcacggagc agggctgaag ttgggacgcg gcacagacgc cccctgcagt ccagcccgaa A atgtctggcc caggcagcaa cggcacgcgcg taccgggggc agttcgctct ataccagcag ctggcgaggg ggaacgcgt ggggggctcg gggggggcac cgcacttggg gccctcacag gtgttcacgc cctgcctgct gacctactc atcatctgga cctgtctggg caacgtgctg gtgtgcgcag ccactgtgcg gagccgcac ctgcgcgca acatgaccaa cgtcttcac gtgtctcttg ccgtgtcaga cctttctg gegtgtgcg tcatgccctg gaaggcagtc gcgaggttgg ccggttactg gccctttgga gcttctgag agtctgggtt ggccttcgac atcatgtgct ccactgcctc catcctgaac ctgtgcgtca tcagcgtgga ccgctactgg gccatctcca ggcccttcgc ctacaagcgc aagatgactc agcgcagtcg cttgtgtcag gtcggccttg catggacctt gtccatctc atctcctca ttcgggtcca gctcaactgg cacagggacc aggggcctc ttggggcggg ctggacctgc caaacaacct ggccaactgg acgccctggg aggagactt ttgggagccc gactgaatg cagagaactg tgaactcagc ctgaatcgaa cctacgccat ctcttctcgc ctcatcagct tctacatccc cgttgccatc atgatcgtga cctacacgcg catctacgc atgcgccag tgcagatccg caggatttcc tccctggaga gggcgcaga gcaaggcgag agctgcgga gacggcagc ctgcccggcc gacaccagcc tgcgcgcttc catcaagaag gacaccaag ttctcaagc cctgtcgggtg atcatggggg tcttcgtgtg ttgtgggttg ccttcttca tcttaactg catgttccct ttctgcagt gacacctga aggccttcgc gcgggttcc cctggtcag tgaaccacc ttcgcagtct tctctgtgtt cggttgggtt aactcctc acacccccg catctatgcc ttcaacgcgcg actttcagaa ggtgttttgc cagctgctgg ggtgcagcca cttctgctcc cgcagcccg tggagacggt gaacatcagc aatgagctca tctctacaa ccaagacatc gtcttccaca aggaatcgc agctgctac atccacatga tgcacaagc cgtttacccc ggcaaccggg aggtggacaa cgacgagag gaggttctt tcatgctcat gttccagatc </p>	Homo sapiens
99	1241	Dopamine Receptor D5	NM_000798	<p> ggcacggagc agggctgaag ttgggacgcg gcacagacgc cccctgcagt ccagcccgaa A atgtctggcc caggcagcaa cggcacgcgcg taccgggggc agttcgctct ataccagcag ctggcgaggg ggaacgcgt ggggggctcg gggggggcac cgcacttggg gccctcacag gtgttcacgc cctgcctgct gacctactc atcatctgga cctgtctggg caacgtgctg gtgtgcgcag ccactgtgcg gagccgcac ctgcgcgca acatgaccaa cgtcttcac gtgtctcttg ccgtgtcaga cctttctg gegtgtgcg tcatgccctg gaaggcagtc gcgaggttgg ccggttactg gccctttgga gcttctgag agtctgggtt ggccttcgac atcatgtgct ccactgcctc catcctgaac ctgtgcgtca tcagcgtgga ccgctactgg gccatctcca ggcccttcgc ctacaagcgc aagatgactc agcgcagtcg cttgtgtcag gtcggccttg catggacctt gtccatctc atctcctca ttcgggtcca gctcaactgg cacagggacc aggggcctc ttggggcggg ctggacctgc caaacaacct ggccaactgg acgccctggg aggagactt ttgggagccc gactgaatg cagagaactg tgaactcagc ctgaatcgaa cctacgccat ctcttctcgc ctcatcagct tctacatccc cgttgccatc atgatcgtga cctacacgcg catctacgc atgcgccag tgcagatccg caggatttcc tccctggaga gggcgcaga gcaaggcgag agctgcgga gacggcagc ctgcccggcc gacaccagcc tgcgcgcttc catcaagaag gacaccaag ttctcaagc cctgtcgggtg atcatggggg tcttcgtgtg ttgtgggttg ccttcttca tcttaactg catgttccct ttctgcagt gacacctga aggccttcgc gcgggttcc cctggtcag tgaaccacc ttcgcagtct tctctgtgtt cggttgggtt aactcctc acacccccg catctatgcc ttcaacgcgcg actttcagaa ggtgttttgc cagctgctgg ggtgcagcca cttctgctcc cgcagcccg tggagacggt gaacatcagc aatgagctca tctctacaa ccaagacatc gtcttccaca aggaatcgc agctgctac atccacatga tgcacaagc cgtttacccc ggcaaccggg aggtggacaa cgacgagag gaggttctt tcatgctcat gttccagatc </p>	Homo sapiens

100	1241	Dopamine Receptor D5	NP_000789.1	<p> taccagacgt cccagatgg. tgacctgtt gctgagctg tctgggagct ggaatggag ggggagattt ctttagacaa aataacacct ttacaccga atggattcca ttaactgca ttaagaaacc cctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca cgcataatac tgccttcca gtgctgtcc cttatcatg tgttctctg tagtagctg tggcttaga aacctcacc cattgattg tagttgaag aattggcaga atcagttgca ataaactcag tcaaatgtac cagcctacc agagatggac caacgatcct atgagagaag agagtatgt gctgggtcct taaaaaaa aatgatactt ggtccttaa aatatgctc tccctccct ttttaaaaa atggttgtt cagtcacttg tttgtgttg aattgattt taaacagcag gttgtgtg tgtgcagtga tgtggtggga gcacagcttt cctgggtctg gattccctg gtttgtgt tatgtcattt cttctctctg tgtggtggg ggcctctta ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataaacacag attatttga aaaaaaaa aaaaaaaa aa MPPGSGNGTA YPGFALYQQ LAQGNVAVGS AGAPPLGPSQ VVTACLTLTLL IIWTLGNVL P Homo VCAIVRSRH LRANNTNVFI VSLAVSDFV ALLVMPKAV AEVAGYWPFG AFCDFWVAFD sapiens IMCSTASILN LCVISVDRYW AISRPYKR KNTQRMALVM VGLAWTSLIL ISFIPVQLNW HRDQASWGS LDLPNNLANW TPWEEDFWEF DVAENCDS LNRTYAISS LISFYIPVAI MIVTYTRIYR IAQVQIRRI SLEAAEAHQ SCRSSAACAP DTSIRASIKK ETKVLKTLV IMGVFVCCWL PFFILNCMP FCSGHPEGPP AGFPCVSETT FDFVWFVFWA NSSLNPVIYA ENADEQKFTA QLLGSHFCS RPTVETVNI NELISYNQDI VFHKEIAAY IHMNPNAVTP GNREVDNDEE EGFDFRMEFI YQTSPPDGPV AFSWELDCE GEISLDKITP FTFNGFHH agagcctggc caccagtg. ctccacgccc ctgattgctc cactgaatct gctcgtgtat A Homo gatgatgac tggagaggca gaactggagc cggccctcca acgggtcaga cgggaaggcg sapiens gacagacccc actacaacta ctatgccaca ctgctacccc tgetcatcgc tgetcatcgc ttgggcaacg tctgtgtgtg catggtgtg tcccggaga aggcgtgca gaccacccc aactacctga tctcagcct cgcagtggcc gacctctcg tggccacact ggtcatgccc tgggtgtct acctggaggt ggtaggtag tggaaattca gcaggattca ctgtgacatc ttgtcactc tggacgtcat gatgtgacg gcgagctac tgaactgtg tgcctcagc atgacaggt acacagctg gccatgccc atgctgtaca atagcgtca cagctccaa cgcgggtca cgtcatgat ctccatgct tgggtcctgt cctcaccat cctcgtccc ctctctctg gactcaataa cgcagaccag aacgagtga tcaatgcaa cccggccttc gtgtctact ctctctctg. ctctctctac gtgcccctca ttgtacccct gctgtctac atcaagatct acattgtcct cgcagagcgc cgaagcag tcaacaccaa acgacgacg cgcgtttca gggccacct gagggtcca cttaaaggca actgtactca cccgagagc atgaactct gcacgttat catgaagtct aatggaggt tccagtgaa caggcgaga gtgagagctg cccgggagc ccaggagctg gagatggaga tgetctccag caccagcca cccgagagga cccgtacag ccccatcca cccagccacc accagctgac tctcccgc cgtcccacc atgtctcca cagcactccc gacgcccgc ccaaccaga gaagaatggg catgcaaaag accacccaa gattgcaag atctttgga tccagacct gccaatggc aaaaaccgga cctccctca gacctagc cgtaggagc tctccagca gaagagaag aaagccactc agatgtcgc cattgtctc ggcgtgttca tcatctgtg gctgccttc tcatcacac acatcctgaa catacactgt gactgcaaa tccgcctgt cctgtacagc </p>
101	1242	Dopamine Receptor D2	NM_000795	<p> gatgatgac tggagaggca gaactggagc cggccctcca acgggtcaga cgggaaggcg gacagacccc actacaacta ctatgccaca ctgctacccc tgetcatcgc tgetcatcgc ttgggcaacg tctgtgtgtg catggtgtg tcccggaga aggcgtgca gaccacccc aactacctga tctcagcct cgcagtggcc gacctctcg tggccacact ggtcatgccc tgggtgtct acctggaggt ggtaggtag tggaaattca gcaggattca ctgtgacatc ttgtcactc tggacgtcat gatgtgacg gcgagctac tgaactgtg tgcctcagc atgacaggt acacagctg gccatgccc atgctgtaca atagcgtca cagctccaa cgcgggtca cgtcatgat ctccatgct tgggtcctgt cctcaccat cctcgtccc ctctctctg gactcaataa cgcagaccag aacgagtga tcaatgcaa cccggccttc gtgtctact ctctctctg. ctctctctac gtgcccctca ttgtacccct gctgtctac atcaagatct acattgtcct cgcagagcgc cgaagcag tcaacaccaa acgacgacg cgcgtttca gggccacct gagggtcca cttaaaggca actgtactca cccgagagc atgaactct gcacgttat catgaagtct aatggaggt tccagtgaa caggcgaga gtgagagctg cccgggagc ccaggagctg gagatggaga tgetctccag caccagcca cccgagagga cccgtacag ccccatcca cccagccacc accagctgac tctcccgc cgtcccacc atgtctcca cagcactccc gacgcccgc ccaaccaga gaagaatggg catgcaaaag accacccaa gattgcaag atctttgga tccagacct gccaatggc aaaaaccgga cctccctca gacctagc cgtaggagc tctccagca gaagagaag aaagccactc agatgtcgc cattgtctc ggcgtgttca tcatctgtg gctgccttc tcatcacac acatcctgaa catacactgt gactgcaaa tccgcctgt cctgtacagc </p>

102	1242	Dopamine Receptor D2	NP_000786.1	MDPLNLSWD DDLEQNWSR PFNGSDGKAD RPHNYVATL LILLIIVIF GNVIVCMVAVS P REKALQTTN YLIIVSLAVD LLVATLVMPW VVYLEVGEW KFSRIHCDIF VTLDVMCTA SILNLCAISI DRYTAVAMPM LYNTRYSSKR RVTVMISIVM VLSFTISCPL LFGLNADON ECIANPAFV VYSSIVSFYV PFIVTLVYI KIYIVLRRR KRVTNRSSR AFRAHLRAPL KGNCTHPEDM KLCIVIMKSN GSEPVNRRV EAARRAQELE MEMLSSTSP ERTYSPIPP SHQLTLDPD SHHGLHSTPD SPAKPEKNKH AKDHPKIAKI FEIQTMPNGK TRISLKTMSR RKLSQKKEK ATQMLAIVLG VFIIICWLPFF ITHILNIHCD CNIPPPVLYSA FTWILGYVNSA VNPIIYTFN IEFKAFIKI LHC	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	taaagaaaac ggatacattc gaaagcagct atgaaacatg cactaagtc taataggaa A gctggaaaag cagcactcaa gtaattcac cttagaggca aaaaagggtg attctttct gttcatttca tagtttctga gtcctgagaa aggcataagt tgctttgctt gggtagtctt gctgtcagta aatggctgca ggagccgaag tggtaaacct ctgggtctcc agaaatcaga agaaaatttt aggaagcccc ttggcatcac gcacctccct ctgggctatg gcattctga gtcagctgag tagccacctg aactacacct gtggggcaga gaactccaca ggtgccagcc agggccgcc acatgcctac tatgcctctt cctactcgc gctcactcctg gccatcgtct tggcaatgg cctgggtgac atggctgtgc tgaaggagcg ggccctgcag actaccaaca actacttagt agtgaacctg gctgtggcag acttgcctgt ggccaccttg gtgatgccct gggtgggtata cctggaggtg acaggtggag tctggaattt cagccgcatt tgcgtgtgatg ttttgtcac cctggatgtc atgatgtgta cagccagcat ccttaatttc tgtgccatca gcataagacag gtacactga gtgggtcatgc ccgttacta ccagcatggc acgggacaga	Homo sapiens

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104 1243 Dopamine NP_000787.1 MASLSQLSSH LNYTGAENS TGASQARPHA YYALSICALI LAIVFGNGLV CMAVLKERAL P Homo
Receptor D3 QTTTNYLVVS LAVADILVAT LVMPWVYVLE VTGGVWNFSR ICCDVFEVTL DVMCTASILN
LCAISIDRYT AVMPVHYQH GTGQSSCRRV ALMITAVWVL AFAVSCPLLF GFNTGDPDV
CSISNPDEVI YSSVVSFYL P FGVTVLVYAR IYVVLKQRRR KRIITRONSQ CNSVRPGFPQ
QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGELKREE KTRNSLSPTI APKLSLEVRK
LSNGRLSTSL KLGPLQPRGV PLREKATQM VAIVLGAFTV CWLFFFLTHV LNTHQQTCHV
SPELYSATTW LGYVNSALNP VIYTFNIEF RRAFLKILSC

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105 1244 Dopamine NM_000797 atggggaaac gcagaccgc ggaacgcgac gggctgctgg ctggggcgcg gccggcgcg A Homo
Receptor D4 ggggcatctg cgggggcatc tgcggggctg gctggggcag ggcggcgcg gctggggggg
ggcgtgctgc tcatcgccgc ggtgctcgcg gggaaactgc tegtgtgctg gagegtggcc
accgagcgcg cctgcagac gccaccaac tcttctatg tgagctgctg ggcgcgcgac
ctctctctcg ctctctggt gctgcgctc ttgcttact cagaggtcca ggggtggcgcg
tggtgctga gccccgcct gtgcgacgc ctcagggcca tggagctcat gctgtgcacc
gcctccatct tcaacctgtg gccatcagc gtggacaggt tegtggccgt gccgtgccc
ctgcgtaca accggcaggg tgggagcgc cggcagctgc tgctcatcg gccacgtgg
ctgtgtctcg cggcggtggc ggcgcctgta ctgtgcggc tcaacgactg gcgcggcgcg
gacccgcgcg tgtgcgcct ggagacgcg gactacgtgg tctactctc cgtgtgctcc
ttcttctac cctgcgcgt catgctgctg ctctactggg ccaegtctcg cggcctgcag
cgctgggag tggcagctg gccaaactg caccgcgcg cgcgcgcgc acccagcgc
cctggccgcg ctccccac gccaccgcg cccgcctcc cccaggaccg ctggcgccc
gactgtgcg ccccgccgc cggccttccc cggggtctcc ggcgcctcc cgcgcgcgc
gcgcgcgcg gcctccccg ggcacctgc ggcgcctcc cgcgcctcc tcccggggg
ctccccag accctgcg cccgactgt ggcgcctcc cgcgcctcc cgcgcctcc
cctgcgcg cgaactgtg gccccgcg cccgcctcc cccaggaccg ctgcgcctcc
gactgtgcg ccccgccgc cggcctccc cggacccct cgggctcca ctgtgctcc
cccgacgcg tcagagcgc cgcgtccc cccagactc cccgcagac ccgagagag
cggcgtgcca agatcccg ccgggagcg aagccatga gggctctgc ggtgtggtc
ggggcctcc tctgtgctg gacgccttc ttctgtgctg acatcacgca ggcgtgtgt

106	1244	Dopamine Receptor D4	NP_000788.1	<p> cctgcctgct cctgtccccc ggggtgggtc agcgccgtca cctggctggg ctacgtcaac agcgccctca acccgtcat ctacactgtc ttcaacgag agttccgaa cgtcttcgc aggccctgc gtgctgtgtg ctgagccggg caccgccgga cggcccccgg cctgatggc aggcctcagg gaccaaggag atggggaggg cgcttttgta cgttaattaa acaaatcct tccc </p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p> MGNRSTADAD GLLAGRGPAA GASAGASAGL AGQAAALVG GVLIGAVLA GNSILCVSVA P TERALQTPIN SFIVSLAAD LLLALIVPL FVYSEVQGA WLSPRLCDA LMAMDVMLCT ASIFNLCAIS VDRFVAVAVP LRYNRQGSR RQLLLIGATW LLSAAVAAPV LCGINDVRGR DPAVCRLEDR DYVYSSVCS FFLPCPMLL LYWATERGLQ RNEVARRAKL HGRAPRRPSG PGPSPPTPEA PRLPQDPCGP DCAPPAPGLP RGPCPDPCGP AAPGLPPDPC GPCAPPAPG LPQDPCGPDG APPAPGLPRG PCGPDCAPPA PGLPQDPCGP DCAPPAPGLP PDCGNSCAP PDAVRAAALP PQTPTQTRR RRAKITGRER KAMRVLVWV GAFLLCWTFP FVWHITQALC PACSVPPRLV SAVTWLGYVN SALNPVIYTV FNAERNVFR KALRACC </p>	Homo sapiens

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	cagggcatct ccaggaaggc ggggcttcaa ccttgagaca gcttcggtt ctaacttga gccgacttt cggagttggg ggggtccggg ccc AVGLLGNLV MEGIVRYTKM KTATNIYFN LANADALATS TLPFQSAKYL METWPFGE CKAVLSIDYY NMFTSIFIT NMSVDRIYV CHPVKALDER TPAKALINI CIWVLASGVG VPIMMAVTR PRDGAUVCM QPSPSWYWD TVTKICVFLF AFVPIIIT VCYGLMLRL RSVRLSGSK EDRSLRIT RMVLVVGAF VWCWAPIHIF VIVWTLVDID RRDPLVVAAL HLCIALGYAN SSINPVLVAF LDENFKRCFR QLCRKPGRP DPSSFSPRE ATARERTAC TFSDGPGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggctgaac caaacggtgc catggggaac tgtctgaca gggtagtat ggggccaaggc A cccagatcc cttatcccta tgcctccat ttccctgct gtttgcctt cagctctttat atctcttct ttctctctc atctttctc ccttccgct ttttctctt ccttcaag tcttttctt tctctcttc ctatgtagc ctctagctc cctctgtgt cctcccttt gcctttgagt cagttccatc ctggtctctt ggtgcctttc cttctgacct tgcactgtc ctccagccc agctgcctg gcttccccc gactgttctt gctccgctc ttcaggctcc ctgctttgtc cttttccact gtcgcactg catctgactc ctgcagagac cttgttctcc caccgacct tctctctgt cctccctcc cactgcccc tcaattccca ggagactctt ccggtgaac tetgatggc tctctgggt atgtctcca ggcggagctc tcccccaa ctgagaactc aagtcagctg gacttgaag atgtatgaa ttctctcat ggtgtgaatg attcttccc agatggagac tatgatgcca acctggaagc agctgcccc tgcactct gtaacctgct ggaatgactt gcaatgacct tcttctatct caccagtgc cgggtatcc tagctagcag cactgtctc tcatgcttt tcaagacctt cttccgctgg cagctctgcc ctggctggcc tgtcctggca cagctggctg tgggcagtg cctctcagc attgtgtgc ccgtcttggc cccagggcta ggtagcactc gcagctctgc cctgtgtagc ctgggctact gtgtctgta tggctcagc tttgcccagg cttgtctgct aggtgtgcat gctccctgg gccacagact ggcctactg acactgctg tcacctggc cagtggtgct tctggtggac tctgcaacct gatatacagc acggagctga aggttttga ggcacacac actgtagcct gtcttgccat cttgtcttg ttgccattgg gtttgtttgg agccaaagggg ctgaagaagg cattgggtat ggggccaggc cctgggatga atatctctg ggcctggtt atttctggt ggcctcatgg ggtggttcta ggaatggatt tctgtgtgag gtccaaagctg ttgctgtgt caacatgtct ggcacagcag gctctggacc tgcgtgtgaa cctggcagaa gccctggca ttttgcactg tgtggctacg cctctgctcc tgcctctatt ctgcccacag gccctggaa cctcttgcc ctctctgcc ctccctgaag gatgctctt tcatctggac accttgaa gcaaatccta gttctctcc cactctgcaa cctgaattaa agtctacact gcctttgtg NP_002027.1 MASSGYVQA ELSPSTENSS QLDFFDVNS SYGVNDSFPD GDYDANLEAA APCHSCNLLD P DSALPFFIIT SVLGILASST VLFMLFRPLF RWQLCPGWPV LAQLAVGSAL FSIVVPVLAP GLGSTRSSAL CSLGYCWMYG SAFAQALLIG CHASLGHRLG AGQVPLTIG LTVGIWVAA LTLPLVTLAS GASGLCTLI YSTELKALQA THTVACIAIF VLLPLGLFGA KGLKALGMG PGFWNLIWA WFIFWPHGV VLGLDFLVR KLLLLSTCLA QQALDLLNL AEAIALHCV ATPLLALFEC HQATRTLLPS LPLPEGWSSH LDTIGSKS	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gatatacacc tggaccaccca ccaatggata tacaatatggc aaacaatttt A actccgccct ctgcaactcc tcagggaat gactgtgacc tctatgcaca tcacagcaag gccagatag taatgcctct gcattacagc ctgctcttca tcatgggct cgtgggaaac tactagcct tggctgctcat tgtcaaac aggaacacac ccaactctac cactctctat tcaacaaatt tgggtatttc tgatatactt ttiaaccacg cttgctctac acgaatagcc tactatgcaa tgggctttga ctggagaatc ggagatccct tgtgtaggat aactgcgcta gtgttttaca tcaacacata tgcaggtgtg aactttatga cctgcctgag tattgaccgc ttcattgctg tgggtgaccc tctaogctac acaagataa aaaggattga acatgcacaa ggcgtgtgca tatttgtctg gattctagta ttgtctaga cactccact cctcatcaac cctatgtcaa agcaggaggg tgaaggatt acatgcttgc agtatccaaa ctttgaagaa actaaatctc tccctggat tctgcttggg gcattgttca taggatagt acttccactt ataatcattc tcatctgcta tctcagatc tgcgtcaaac tcttcagaaac tgcacacaa aaccacactca ctgagaaatc tgggtgaac aaaaagctc tcaacacaaat tattcttatt attgttgtgt ttgttctctg ttccacacct taccatgttg caattattca acatagtatt aagaagcttc gtttctctaa tttctctgaa tctagcctcaaa gacattctgt ccagatttct ctgcacttta cagtatgcct gatgaacttc aattgctgca tggacccttt tatctacttc ttgcatgta aagggtataa gagaagggtt atgaggatgc tgaacggca agtcagtga tcgatttcta gtgctgtgaa gtcagccct gaagaaat cactgaaat gacagaaacg cagatgatga tacattccaa gtctcaaat ggaagtga aatggttga ttttggttta tagtgacgta aactgtatga caactttgc aggacttccc ttataaagca aaataattgt tcagcttcca attagtattc ttttatttt ctttctattg gactttccc atctccaact cggaagtaag ccaagagaa caacataaag caaacacat aaagcaaat aaaaatgcaa ataaatattt tcaattttat ttgttaacga atacacaaa aggagcgct cttataaact cccaatgtaa aaagtattgt ttaataaaa aatttaatta ttatttctg ccaacaaatg gctagaaggg actgaataga ttatatattg ccagatgta atactgtac atacttttta aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gtttgtttc gttctgggtc ataaaacttt gttaaggaaac tcttttgaa taagagcag gatgctgc	Homo sapiens
112	1451	EBV-Induced Gene 2	NP_004942.1	MDIQMANNFT PPSATPQOND CDLYAHSTA RIVMPLHYSL VFILGLVGNL LALWIVQNR P KINSTTLYS TNLVSDILF TTALPTRIAY YAMGFWRIG DALCRITADV FYINTYAGVN FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCIFWILVF AQTLPILINP MSKQEAERIT CMEYPNFEEF KSLPWILLGA CFIGYVLPJI IILICYSQIC CKLFRTAKQN PLTEKSGVVK KALNTIILII VVFVLCFTPY HVAIIQHMII KIRFSNFLEC SQHRSFOISL HFTVCLMNFN CCMDPFIYFF ACKGYKRRKM RMLKRQSVSVS ISSAVKSAPE ENSREMTETQ MMHKSNSNG K	Homo sapiens
113	1486	Endothelin B Receptor	NM_000115	gagacattcc ggtggggggac tctggccagc ccgagcaacg tggatctctga gagcactccc A aggtaggcatt ttgcccctgt gggacgcctt gccagagcag tgtgtggcag gcccctgtg aggatcaaca cagtggctga acactgggaa ggaactggta cttggagtct ggacatctga aacttggctc tgaactgcg cagcggccac cggacgcctt ctggagcagg tagcagcatg cagccgcctc caagtctgtg cggacgcgc ctggttgcgc tggttcttgc ctgcgccctg tcgcggtatct ggggagagga gagaggcttc ccgcctgaca gggccactcc gcttttgcaa	Homo sapiens

accgcagaga taatgacgco accactaag acctatggc ceaaggggttc caacgccagt
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tataactt ttaaaagaa aattattaca tcttttacct tcaagtaaga tcaaacctca
caagagaaaa tagaatgttt gaaagctat ccaaaaagac tttttgaat ctgtcattca
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gcaggtagca cctctctca ccatgtctgt ggttaaatg gtttctagca tatgtataat
gctatagtta aaatactatt ttcaaaatc atacagatga gtacatttaa cagctacctg
taaagcttat tactaatttt tgtattattt ttgtaaatag ccaatagaaa agtttgcttg

114	1486	Endothelin B NP_000106.1	Receptor	<p> acatgggtgct tttctttcat ctaggagcaa aactgctttt tgagacccta agaacctctt agctttgtgc gttcctgctt aattttata tcttctaagc aaagtgcctt agtagagctt ggatgagat gttgtgtaaa gtagtacaat gagaaacggg aagagagagg aaatgagggtg gggttggagg aaacctagg ggacagattc ccattcttag cctaaagttc gtcattgctt cgtcacatca atgcaaaaagg tctgtatttt gtccagcaa acacagtgcc aatgttctca gagtgacttt cgaataaat tgggccaag agctttaact cgtctttaa atatgcccaa atttttactt tgtttttctt ttaataaggct gggtcacatg ttggaataaa gctagtatg ttgttttctg tcaatattga atgtgatgtt acagtaaac aaacccaac aatgtggcca gaagaaaaga gcaataataa ttaattcaca caccatagg attctattta taaatcacc acaacttgt tctttaattt catccaatc acttttccag aggcctgtta tcatagaagt cattttagac tctcaatttt aaattaattt tgaatcacta atatttccac agttatttaa tatatttaatt tctattttaa attttagatt atttttatta ccatgtactg aatttttaca tcttgatacc ctttcttctt ccatgtcagt atcatgtctt ctaattatct tgccaaaattt tgaaactaca cacaaaaagc atacttgcct tatttataat aaatttgcct tcatgtggctt tttaaaaaaa atgtttgatt caaaacttta acatactgat agtaagaaa caattataat ttctttacat actcaaaaacc aagatagaaa aagggtgctat cgttcaactt caaacatgt tctctagat taaggacttt aatatagcaa cagacaaaat tattgttaac atggatgtta cagctcaaaa gatttataaa agattttaac ctattttctt ccttattatc cactgtcaat gtgatgtat gtccaacac ctittagat tgatagctta catatggcca agaaataca gtttatagca aaacatgggt atgtgttagc taactttata aaagtgtaat ataacaatgt aaaaaattat atactggga ggaatttttt gtgctcaaa gtggctatag ttaactgattt tttattatgt aagcaaaaacc aataaaaatt taagtttttt taacaactac cttatttttc actgtacaga cactaatcca ttaataacta attgatgttt taaaagaaaat ataatgtga caagtggaca ttatttatgt taaatataca attatcaagc aagtatgaag ttattcaatt aaaaagccac attctggct tctggg SLARSLAPAE VPKGDRTAGS PPRTISPPPC QGPIEIKETF KYINTVWSCV VFVIGIIGNS TLRLRIYKKN CMRNGENILI ASLALGDILH IVIDIPINNY KLLAEDWPFQ AEMCKLVPFI QKASVGITVL SLCAISIDRY RAVASWSRIK GIGVPRWTAV EIVLIWVSV VLAVPEAIGF DIITMDYKGS YLRICILHPV QKTAFMQFYK TAKDWLLEF YFCPLAITA FFYILMTCEM LRKSGMQIA LNDHLKQRRE VAKTVFCILV VFALCWLPPLH LSRILKLTLY NQNDPNRCEL LSFLVLVDYI GINMASLNSC INPIALYVS KRFKNCFKSC LCCWCQSFEF KQSLLEEKQSC LKFKXNDHGY DNFRSNKYS SS gaattcgagg ccgctcttgg cgggtccaga gtggagtggga agtctggag ctttggggagg A agacggggag gacagactgg aggcgtgttc ctcggaggtt tcttttttcg tgcgagccct cgcgcgcggg tacagtcatc ccgctgtctt gacgattgtg gagagggcgtt ggagaggctt catccatccc acccgtcgtt cgcgggggat tgggttccca ggcacacccc ccggggagaa gcagtggcca ggaagttttc tgaagccggg gaagctgtgc agcgaagacc gccgcgcgcg cggagcccgagg gacacggggc accctccgag ccccccacc tgcctttctc cggcttcttc tggccaggc gccgcgcgga cccggcagct gtctgctcac gccgagctcc acggtgaaaa aaaaagtga ggtgtaaaaa gacacacagt gcaataaag atatttcttc aaatttgcct </p>	Homo sapiens
115	1488	Endothelin A NM_001957	Receptor	<p> gaattcgagg ccgctcttgg cgggtccaga gtggagtggga agtctggag ctttggggagg A agacggggag gacagactgg aggcgtgttc ctcggaggtt tcttttttcg tgcgagccct cgcgcgcggg tacagtcatc ccgctgtctt gacgattgtg gagagggcgtt ggagaggctt catccatccc acccgtcgtt cgcgggggat tgggttccca ggcacacccc ccggggagaa gcagtggcca ggaagttttc tgaagccggg gaagctgtgc agcgaagacc gccgcgcgcg cggagcccgagg gacacggggc accctccgag ccccccacc tgcctttctc cggcttcttc tggccaggc gccgcgcgga cccggcagct gtctgctcac gccgagctcc acggtgaaaa aaaaagtga ggtgtaaaaa gacacacagt gcaataaag atatttcttc aaatttgcct </p>	Homo sapiens

caagatggaa accctttgac tcaggggcgc cttttggctg gcactgggtg gatgtgtaat
cagtataat cctgagagat acagacacaa tctaagaat catgtggatg attccaccac
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atgattcaga aattttcatt caggtatttt taatagtagc atatatatgt atatacatat
cacctcctat tctcttaatt ttgttaaaa ttgttaactgg cagtaagtct tttttgatca
ttcccttttc catataggaa acataatttt gaagtgagca gatgagtta tcatgtcagt

116	1488	Endothelin A NP_001948.1	Receptor	<p>gaaaaataat taccacaaa tgccaccagt aacttaacga ttcttcactt cttgggggttt tcagtatgaa cctaactccc caccacaaca tctccctccc acattgtcac catttcaaaag ggccacacgt gacttttgtt gggaatttcc ccagatgttt acagactgtg agtacagcag aaaatctttt actagttgtg gtgtgtatat atataaaca ttgtaaaattt cttttagccc attttctag actgtctctg tggaatatat ttgtgtgtgt gatatatgca ttgtgtgtgat ggatgtatg gatttaact aatctaataa ttgtgccccg cagttgtgcc aaagtgcata gtctgagcta aaactaggt gattgttcat catgacaacc tgcctcagtc catttaacc tgtagcaacc ttctgcattc ataaactctg taatcatgtt accattaca atgggatata agaggcaggg tgaagcaga tgagctgtgg actagcaata tagggttttt ttgggttgtt tggtttgata aagcagtatt tgggtcaca ttgtttctg tgcctggagca aaagtcatta cactttgaag tattatattg ttcttatcct caattcaatg tggigtatgaa attgccaggt tgtctgatat ttctttcaga cttgccaga cagattgtctg ataataaatt agttaagata atttgttggg ccataattta ggacaggtaa aataacatca ggttccagtt gcttgaattg caaggctaag agtactgcc cttttgtgtg ttagcagtc aatctattat tccactggcg catcatatgc agtcatatat gcctataata taagccatag gttcacacca ttttgtttag acaattgtct tttttcag atgctttgtt tctttcatat gaaaaaaatg cattttataa attcagaaag tcatagattt ctgaaggcgt caacgtgcat tttatttatg gactggtaag taacttgtgt ttaactagcag gaattattcc attttacc tttactacat cttttcaaca agtaactttg tagaaatgag ccagaagcca aggccttgag ttggcagtggt ccataagtg taaaaaaa gtttacagaa acctt</p>	Homo sapiens
117	1598	Calcium-Sensing Receptor (CASR)	NM_000388	<p>caacaggcac ctggctgcag ccaggaagga ccgacgccc ttctgcgcag gagtgga A ggaggagct gttgcccag ccgaggtct tgcggcacag gcaacgcttg acctgagttt tgagaaatga aaggcatcac aggagcctc tgcattgagt ggttcccaa gactcaagga cccccacat tacagtcgt gattgaggaa ggcagaaatg gagattcaaa caccacgtct tctattattt tattaatcaa tctgtagaca tgtgtcccca ctgacaggag tgaactgctc caagggagaa acttctgga gcctccaaac tctagctgt ctcactcctt gccctggaga gagggcagaa ccatggcatt ttatagctgc tgcctggctc ttctggcact cactgggac acctctgct acgggccaga ccagcagcc caaagaagg gggacattat ccttgggggg ctctttccta ttcatttttg agtagagct aaagatcaag actcaaatc aagcccgag tctgtggaat gtatcaggt taattccgt ggtttcgtt ggttacaggc tatgatattt gcatagagg agataaacag cagccagcc cttcttcca acttgacct gggatacagg atatttgaca cttgcaacac cgtttctaag gccttggaag ccacctgag ttttgtgtct caaaacaaaa ttgattcttt gaacctgat gagtcttga actgctcaga gcattctcc</p>	Homo sapiens

tctacgattg ctgtggtggg agcaactggc tcaggcgtct ccaggcgagt gcaaatctctg
ctggggctct tctacattcc ccaggtcagt tatgctctct ccagcagact cctcagcaac
aagatcaat tcaagtcttt cctccgaacc atcccgaatg atgagcacca ggccactgac
atggcagaca tctcgagta ttcccgctgg aactgggtgg gcaaatggc agctgatgac
gactatgggc ggccgggagt tgagaaattc cgagaggaag ctgaggaag gatatctgc
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gagtgattc aaattccac ggccaaagtc atcgtggtt tctccagttg cccagatctt
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gaggcctgg ccagctctc cctgatgcc atgcctcagt acttccagct gtttggcgc
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aactgccacc tccaagaagg tgcaaaagg cttttacctg tggacacct tctgagaggt
cacgaagaaa gtggcgacag gtttagcaac agctcgacac cctccgacc cctctgtaca
gggatgaga acatcagcag gtgcgagacc cttacatag attacacgca tttagggata
tctacaatg tgaactagc agtctactcc attgccag ccttgcaaga tataatacc
tgtttacctg ggagagggt cttcaccaat ggtcctctg cagacatcaa gaaagttag
gctgggcagg tctgaagca cctacggcat ctaaacctta caacaatat gggggagcag
gtgaccttg atgagtgg tgacctgtg ggaactatt ccatcatcaa ctggacctc
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aaggagagaa gactcttcat caacgagag aaatcctgt ggagtgggt ctccaggag
gtgccctct ccaactgcag ccgagactgc ctggcaggga ccaggaagg gatcattgag
ggggagccca cctgtgctt tgagtgtgtg agtgtctcg atggggagta tagtgatgag
acagatgcca gtgctgttaa caagtgcga gatgacttct ggtcaatga gaaccacac
tcctgcattg ccaaggagat cgagtctctg tctgtgacag agccttttg gatcgactc
acctctttg ccgtgtggg catttctg acagccttg tctgtggtg gttatcaag
ttccgcaaca caccattgt caaggccacc aacgagagc tctctacct cctctcttc
tccctgctct gctgctctc cagctcctg ttcttcagc gggagcccca ggaatggag
tgccgctgc gccagccggc cttggcacc agcttcgtg tctgacttc atgcatcctg
gtgaaacca accgtgtcct cctgtgtctt gaggccaaga tcccaccag ctccaccgc
aagtgggtgg ggtcaacct gacttctct ggtgttctc tctgacctt catgcagatt
gtcatctgt tgatctgggt ctacacggc cccctcaca gctacggcaa ccaggagctg
gaggatgaga tcatcttcat cactgtccac gagggtccc tcatggcct gggctctctg
atcggtaca cctgcctgt ggtgccatc tctctcttct ttgcttcaa gtcccgaaag
ctgccggaga acttcaatga agcaagttc atcacttca gcatctcat cttctctatc
gtctgatat cttctattcc agctatgcc agcactatg gcaagtittg cctgcccga
gaggtgatg ccatctggc agcagcttt ggtgtgtg gctgactct cttcaacaag
atctacatca ttcttcaa gccatccgc aacacctg aggaggtggt ttgagacc
gcagctcag ctttcaaggt ggtgtccgg gccagctgc gcgagcaa cgtctccgc
aagcgtcca gcagccttg aggtccacg ggtccacc cctctctc catcagcagc
aagagcaaca gcgaagacc attcccacag cccgagaggc agaagcagca gcagcgtg
gccctaacc agcaagagca gcagcagcag cctctgacc tcccacgca gcaacgatct

118	1676	Calcium- Sensing Receptor (CASR)	NP_000379.1	MAFYSCCWVL	LALTWHTSAY GPDQRAQKKG DIILGGLFPI HFGVAAKDQD LKSRPESVEC P	Homo sapiens
					IRYNFRGFRW LOAMIFAIEE INSSPALLPN ITIGYRIEFT CNTVSKALEA TLSFVAQNKI	
					DSLNLDEFON CSEHIPSTIA VVGATGSGVS TAVANLLGLF YIPQVSYASS SRLLSNKNQF	
					KSELRTPND EHQATAMADI IEYFRWNWVG TIAADDDYGR PGIEKFREZA EERDICIDFS	
					ELISQYSDEE EIQHVVEVIQ NSTAKVIVVF SSGPDLEPLI KEIVRRNITG KIWLASEAWA	
					SSSLIAMPQY FHVVGITGF ALKAGQIPGF REFLKKVHPR KSVHNGFAKE FWEETFNCHL	
					QEGAKGPLV DTFLRGHEES GDRFSNSTA FRPLCTGDEEN ISSVETPYID YTHLRISYNV	
					YLAVYSIAHA LQDIYTCPLG RGLFTNGSCA DIKKVEANQV LKHLRHLNFT NNMGEQVTFD	
					ECGDLVGNYS IINWHLSPED GSIVFEKVG YNVYAKKGER LFINEEKILW SGFSREVPFS	
					NCSRDCLAGT RKGIIIEGPT CCFCVECPD GEYSDETDAS ACNKPDDFW SNEHTSCIA	
					KEIEFLSWE PFGIALTLFA VLGIFLTAFLV LGVFIKFRNT PIVKATNREL SYLLFSLLC	
					CFSSSLFFIG EPQDWTCLRL QPAFGISFVL CISCILVKTN RVLIVFEAKI PTFHRKWWG	
					LNQLLELVEL CTFMQIVICV IWLYTAPPSS YRNOLEDEI IFITCHEGSL MALGFLIGYT	
					CLLAACIFFE AFKSRKLLEN FNEAKFTFS MLIFFIVWIS FIPAYASTYG KFVSAVEVIA	
					ILAA5FGLLA CIFFNKIYII LFKPSRNTIE EVRCSTAAHA FKVAARATLR RSNVSRKRSS	
					SLGGSTGSTP SSSI5SKSNS EDPFPQPERQ KQQQLALTLQ QEQQQQLPLL PQQQR5QQP	
					RCKQKVI5GS GTVTF5LSFD EPQKNANAHG NSTHONSLEA OKSSDTLTLRH QLLPLQCGE	
					TDLDTVQET GLQGPVGGDQ RPEVEDPEEL SPALV5SSQ SFVISGGGST VTENVVNS	
119	1676	Formyl Peptide Receptor- Like Receptor	NM_001462	ggaacagga	ggaacagga acaacctatt tgcaaatgtg ggcacaaat tctgcctga caggaccatg A	Homo sapiens
					gacacaggtt gtagagatag agatggctct ggctgtgcat tcagcagatt ctgtagatag	
					aattaatagg acttgatgg gattgtgtg agagaaagtg aaatgaaaga taagtcttag	
					tttggaagt ttacaactg aatgtttaa ctcaaataga cacaataat tggagagtg	
					gcaggtttgg gaggatgaga caatcaactg ttgtgttgag ccacgttagg ttgaaatgt	
					ctacgggac ccgtggggag aggttatatc agactggagc accagagaga gccaaggt	
					gatagtttag atgaaagag agcatgatatt tttaagccct gagactggat aatatcaact	
					atagaaagac tatatagaga taagagaggt ggggaacaag taaaagctgc gggacactcc	
					taatttaga gtcaaattha gacagaaaa tactagcaaa gggagactgaa aagcgtggc	
					caattgagct tcaaatgcaa gtgaaagtgt gtgtgtgtga cattatcat ctcattggcac	
					aggaaaaacg tgatttaagg agaaggagc gatccaatgg gaagaagaga tccaatggat	
					cctctatcac gaagatattg agataagaac caatatggat ttgcaccac tgcatttgca	
					gccttgaggt cataagcatc ctcaggaaaa tgcaccaggt gctgctggca agatggaaac	

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctcc atctctctctga atgaatatga agaagtgtcc tatgagtctg ctggctaacac tggtctggg atctctccat tgggtgtgct tgggtgcacc ttgtctctcg ggttccctggg caatggggtt gtgatctggg tggctggatt ccggtatgaca cgcacagtca ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttccacggcc acattaccat tctcatctgt ctccatggcc atgggagaaa aatggccttt tggctgggtc ctgtgtaagt taattcacat cgtgtggac atcaacctct ttggaagtgt ctctctgatt ggtttcattg cactggacag ctgcatttgt gtctgcac cagctgtggc ccagaaccac cgcactgtga gtctggccat gaaggtgac gtccgacctt ggattcttgc tctagtctt accctggcag ttctctcttt tttgactaca gtaactattc caaatgggga cacatactgt acttccact ttgcatctctg gggtggcacc ctgaggaga ggctgaaggt ggccattacc atgctgacag ccagagggat tatccgggtt gtcatgtgtt ttagtctgcc gatctccat ttggccatct gctatgggt cattgcagcc agatccaca aaaagggcat gattaatcc agcgtccct taagggtcct cactgctgtg tgggtctctt tctctatctg ttggtttccc tttaacatgg ttgcccttct gggcacctc tggctcaag agatgttgtt ctatggcaag tacaataatca ttgacatctt ggttaaccca acagctccc tggccttctt caacagtgc ctcaaccaca tgccttaagt ctttgtggc caagacttcc gagagagact gatccactcc ctgccacca gctcggagag ggccctgtct gaggactcag cccaactaa tgacacggct gccaatctgt cttcacctcc tgacagact agttacag caatgtgagg atgggtcag gatatatttg agtctcttcc atcctacact aatgccagtt ccagcttcat ctacacctga gtcattatga ggcattcaag gatgcacag tcaagtattt attcaggaaa aatgcttttg tgcctctgat ttggggctaa gaaatagaca gtcaggctac taaaatatta gtgtatttt ttgtttttg actctgcct ataccctggg gtaagtggag ttgggaaata caagaagaga aagaccagtg ggtatttga agacttagat gagatagcgc ataataaggg gaagacttta agtataaag taaatgttt gctgtagggt ttttatagct attaaaaaa atcagattat ggaagtcttc tctattttt agttgctaa ggttttctg tttcttttc ttacatcatg agtggacttt gcattttatc aaatgcatt tctacatgta ttaagatggg catattatct tctctcttt atgtaataca ttataataaa tgttcattaa gttctgaatg ttaactact ctggaattcc tggataaacc cacacttagt cctgatgtac tttaaatatt tatatctcac agpagtttgt tagaatctt gtgtttatgt ttatatactg ttatttcat ttcttacta tctctgtaa gttttcatg aaaaaagga aaaaagaga, acttgaatg gctctgaaa aggaattgag aagtaattcc tctgattctg tttctgtgtg ttatatcttt attaaattt cagaaaaatt c tctgattctg tttctgtgtg ttatatcttt attaaattt cagaaaaatt c	Homo sapiens
121	1681	Follicle Stimulating Hormone Receptor	NM_000145	TICLYNLALA DFSTATLPE LIVSMANGEX WPFWFICKL IHIVDINLF GSVFLIGETA LDRICIVLHP VMAQNHRTVS LAMKIVGPW ILALVTLTPV FLELTWTIP NGDYCTFNF ASWGGTPEER LKVAITMLTA RGIIRFVIGF SLPMISVAIC YGLIAAKTHK KGMKSSRPL RVLTAVASF FICWFFPQLV ALLGTWILKE MLFYGYKRII DILWPTSSL AFNSCLNPM LVFVQGDFR ERLHSLPTS LERAISEDSA PTNDTAANSA SPPATELQA M cctgagatc tgggaggtt ttctctgca aatgcagaaa gaaatcaggt gnatggatgc A ataattatgg cctgctctct ggtctctttg ctggcattcc tgagcttggg ctcaggatgt catcatcgga tctgtcactg ctctaacagg gtttttctct gccaaagagag caaggtgaca gagattcctt ctgacctccc gaggaatgcc attgaaactga gttttgtcct caccagctt	Homo sapiens

122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> cagatcatcc aaaaagggtgc atttcaggga tttaggggacc tggagaaaaat agagatctct cagaatgatg tcttgagggt gataaggga gatgtgtctt ccaaccttcc caattatcat gaaattagaa ttgaagaagg caacaacctg cttatcatca cccttgaggc ttcacagaac cttcccaacc ttcaatatct gtaatatctc aacacaggtt ttaagcaact tccagatgtt cacaagattc attctctcca aaagggttta cttgacattc aagataaacat aascatccac acaattgaaa gaaattcttt cgtggggctg agcttgaaa gtgtgatctt atggctgaat aagaatggga tcaagaatat acacaactgt gcattcaatg gaaccaact agatgcagtg aatctaaggc atataataa tttagaagaa ttgcctaag atgttttcca cggagcctct ggaccagtca ttctagatat tcaagaaca aggatccatt cctgacctag ctatggctta gaaatcttta agaagctgag ggcaggtgag acttaacat taaaaagct cctactctg gaaaagcttg tggccctcat ggaagccagc ctacactatc ccagccattg ctgtgcttt gaaaactgga gacggcaaat ctctgagctt catccaattt gcaacaaatc tattttaagg caagaagtg attatatgac tcagggtagg ggtaagagat cctctctggc agaagacaat gggtccagct acagcagagg atttgacatg agtaeactg agtttgacta tgacttatgc aatgaagtgg ttgaagtga cgtgctccct agccagatg cattcaacc atgtgaagat atcatggggt acaacatcct cagagctctg atatgggtta tcagcatcct ggcctcact gggaacatca tagtgctagt gatcctaact accagccaat ataaactcac agtccccagg ttccttatgt gaaacctggc ctttgctgat ctctgacttg gatctacct gctgctcatt gatcagttg atatccatc caagagccaa tatcacact atgccattga ctggcaaat ggggcaggct gtgatgctgc tggctttttc actgtctttg ccagtgaagt gtcagtctac actctgacag ctatcacctt ggaagatgg cataccatca ccatgccat gcagctggac tgcaaggctc agctccgcca tgcgtccagt gtcagtgtga tgggctggat ttttgcctt ggagctgccc tctttcccat ctttggcatc agcagctaca tgaaggtgag catctgctg cccatggata ttgacagccc ttgtcacag ctgtatgtca tctccctct tgtgctcaat gtcctggcct ttgtggtcat ctgtggtgc tatatccaca tctacctcac agtgcggaac cccaacatcg tgtctcctc tagtgacacc aggatcgcca ccatcttgc ctccctcaag ttcactgact tctctgcat ggcaccatt tcttctctg caatttctg ctcctcaag gtgccccca tcactgtgtc caagcaaaag attctgttg ttctgtttca cccatcaac tctgtgcca acccttctc ctatgccatc tttaaaaaa actttcgag agattcttc attctgtga gcaagtgtg ctgctatgaa atgcaagccc aaatttatag gacagaaact tcatccactg tccacaacac ccatccaagg aatggccact gctcttcagc tccagagtc accagtgtt ccaattacat actgtccct ctaagtcatt tagcccaaaa ctaaaaaca atgtgaaaat gtatctgagt attgaatgat aattcagtc ttgctttga aggtatgtc acaaggagat gacagtgtt ctacacattt catctaattt aatattctg gcatacttt aaggtaaatt ggtcaggaac tattaattc atgtgataca ttaggaaagt gaattattg taacaacaat ataattaaa gaatgaata ctgtaaaaa gggccgcga att IQKAFSGFG DLEKIEISQ DVLEIADV FSNLPKHEI RIEKANALLY ITPAFQNL P NLQYLLISNT GIKHLPDVHK IHSLOKVLDD IQDNINHTI ERNSFVGLSF ESVILWLNK GIQEIHNCAF NGTOLDVAVNL SDNNLEELP NDVFGASGP VLDISRTRI HSLFSYGLEN LKKLRARSTY NLKKLPTLEK LVALMEASIT YPSHCCAFAN WRQISELHP ICKNSILRQE </p>	Homo sapiens
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123	1726	G Protein- Coupled Receptor RDC1	U67784	<p>VDYMTQARGQ RSSLAEDNES SYSRGFDMTY TEFDYDLCNE VDVTCSPKP DAFNPCEIDIM GYNILRVLW FISILAITGN IIVLVILTS QYKLTVPREL MCNLAELADLC IGIYILLIAS VDIHTKSQYH NYAIDWQTGA GCDAAAGFTV FASELSVYTL TAITLERWHT ITHAMQLDCK VQLRHAASVM VMGWIEFAA ALFPIFGISS YMKVSIICLPM DIDSPLSQLY VMSLLVINVL AFWICGCIY HIYLTVRNPN IVSSSDTRI AKRMAMLIET DFLCMAPISE FAISASLKVP LITVSKAKIL LVLFPINSC ANFLYAIET KNERRDFEIL LSKGCGYEMQ AQIYTTETSS TVNTHPRNG HCSSAPRVTG GSTYILVPLS HLAQN</p> <p>gccaactcgg tgggtgctcg ggtgaatcag caggccaaga ccacaggcta tgacacgcac A tgctacatct tgaactcggc cattgccgac ctgtggggtg tectcaccat cccagtcctg gtggtcagtc tctgtcagca caaccagtg cccatgggag agtcacagtg caaagtcaca cactcatct tctccatcaa cctcttcagc agcattttct tctcagctg catgagcgtg gacgcgtacc tctccatcac ctacttcacc aacaccccca gcacagagaa gaagatggta cgccgtgctg tctgcatcct ggtgtgctg ctggccttct gctgtctct gcctgacacc tactaccta agacgtcac gctcgtctc acaatgaga cctactgcg gtcctctac ccgagacaca gcataaaga gtggtgagc ggcatggagc tggctctcgt tgtcttgggc tttgccgttc cctctccat tatcgtctg tctacttcc tctctccta cgtgtggtgc ggtccagtg accagagaa gcacagcagc cggaagatca tctctccta cgtgtggtgc ttccttctct gctgtgtgct ctaccagtg cggtgtgctc tggacatctt ctccatcctg cactacatcc ctctcactg ccggtggag cagccctct tccagcctt catgtcaca cagtgcctgt cgtgtgtgca ctgctgctc acccctgtcc tctacagctt cateatcgc aactacaggt acgagctgat gaagccttc atctcagt actcggccaa aacagggtc accaagctca tcatgctc cagagctcga gagcggagt actcgtcctt ggacagagc acaaaatgat ctgcctcga gaggctctg gacgggttta ctgtttttg aacagggtga tgggccctat ggtttctag agcaaacgaa agtagcttcg ggtcttgatg cttgagtaga gtgaagagg gagcagtc cccctgcac cattctct tctcttgat gacgagctg tcatctggt gtgcgtgctg acagtcttc aacaggcaga gctgtgtcgc acagcagtc tgtgcgtcag agccagctga gcacagctt gctcggactt ctgtaagata ggttttctg tgcttctga atttttata tgggtgattg tattaaatt ttaagacttt atttctcac tattggtga ccttataat gtattgaaa gtbataata ttttaatat tgtttgggag gcatagtct gacataat cagagtgtg tagtttttaag gttagcgtga cttcagttt tgactaagga tgacactaat ttttagctgt ttgaaataa tatatatata aatatataa tatatgccag tcttgctga aatgttttat ttaccatagt ttatatctg tgtgtgtgtt tgtaccgca cgggatattg aacgaaact gctttgtagt gacgtttgtg acataaag tattgtaaaag ttacatttta aataaaca aaaaactgtc tggactgcaa atctgcacac acaacgaaca gttgatttc agagattct ctcaattgt aagttatttt ttttaataa agattttgt tctcaaaa aaaaaaaa aaaaa</p> <p>MDLHFDYAE PGNFSDISWP CNSSDCIWD TVNCPNMPNK SVLYTLSFI YIFIVIGMI P ANSVVVWNI QAKTTCYDTH CYILNLAIAD LWVLTIPW VVSLVQHNQW PMGELTCKVT HLIFSINLFS GIFFTCMSV DRYLSITYFT NTPSSRKNW RVVCLVWL LAFCVSLPDT YLLKTVTSAS NNETYCRSFY PEHSIKEWLI GMELSVVVG FAVFSSIAV FYELLARAI ASSDQEKHSS RKLIIFSIVV FLVCLPYPHV AVLLDIFSIL HYIFETCRLE HALFTALHVT</p>	Homo sapiens
124	1726	G Protein- Coupled Receptor RDC1	AAA62370.1	<p>MDLHFDYAE PGNFSDISWP CNSSDCIWD TVNCPNMPNK SVLYTLSFI YIFIVIGMI P ANSVVVWNI QAKTTCYDTH CYILNLAIAD LWVLTIPW VVSLVQHNQW PMGELTCKVT HLIFSINLFS GIFFTCMSV DRYLSITYFT NTPSSRKNW RVVCLVWL LAFCVSLPDT YLLKTVTSAS NNETYCRSFY PEHSIKEWLI GMELSVVVG FAVFSSIAV FYELLARAI ASSDQEKHSS RKLIIFSIVV FLVCLPYPHV AVLLDIFSIL HYIFETCRLE HALFTALHVT</p>	Homo sapiens

125	1762	Galanin Receptor GalR1	NM_001480	AK	<p> OCLSLVHCCV NPVLYSFNR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALFQN atccgcctag atccgttcca gtctctgtc gcgaccgtg acttctaagg ggcgcggatt A tcagccgagc tgatttgcg tctcagttgc agcagagaag cccctggcac ccgactctat ccaccaccag gaagcctccc aaagagctc tcgacctgtg gacgactcgg aatccctgga aaagccggga gggagtctga ggcgcagcc cactggggag gtggcgttgg ggcgcggga tgcgcgggga gcattctctg caggagccgc acagtgcact gctgcgcgt ggcagtgctg gggaagccgc gcgggaagga gcggctccga gcaacaggtg cagcaocgag, ccgtccggg agccaggga aaccgcggc gaagatcttg agcgtaagg cggagagaag ggtctttcca cctgcgggc tgagccggc ggatccctct tcccagctc cgtggtcgcg cagcgggcg aggcgcggc gcaggggacc ccagtgtctc cgagatcacc gtcccttccc gagaaggtcc agctccggc tccgaacc accctctctc agaatgtcg ggcgaaaga cgtgcccac aggcacggc accggtacc cgtcccgct ggtcgcgc tgggggaag ctcagactcc taactcgca ctctccgtg tttgcgcgg gacctgtg caccocggc gctgtctatc ccgcctccc tcccgcgcg cccgcgcgt cgcgggaca gccccgggg ccatggagct ggcggtcgg aactcagcg agggcaacgc gagtggcg gagcccccg cccggagcc cgggcgctg ttggcatcg gcgtggagaa ctctgcacg ctggtgtgtg ttggcctgat ctctgcctg ggcgtgctg gcaacgcct agtgcaccc gtgctggcg gcagcaagcc ggcgaagcgc cggagcaca ccaacctgt cactccaac ctgagcatcg ccgacctgc ctacctgc ttctgcacc ccttcaggc caccgtgtac gcctgcaca cctgggtgct ggcgccttc atctgcaagt tcatcacta ctcttcacc gtgtccatg tgtgagcat ctccacctg gcgcgatgt ccgtggaccg ctacgtggcc atcgtgcact cgcggcgctc ctctccctc aggtgtctcc gcaacgcgt cctggcggtg gctgcatct ggcgcgtgct cattgcatg cctgcgcg tggctacca ccaggcctc tccaccgc gcgcagcaa ccagacctc tctggggagc agtggccga cctgcacc aagaaggcct acgtggtgtg cacttctgc ttcggctacc tctgcgcgt cctgctcacc tcttctgt atgccaaggt ccttaatcac ttgcataaa agttgaaga catgtcaag agtctgaag catccaaga aaagactga cagcagttc tgggtgtgtg tgtgtgtgtt ggaatctct gctgcgca ccacatcac catctctgg ctgagtgttg agtttccc ctagcgcgg cctctctct ctccagatc accgcccact gcctggcgta cagcaatcc tccgtgaatc ctatcattt tgcattctc tctgaaatt tcaggaggg ctataaaca gtgttcaagt gtcacattcg caagattca cactgagtg atactaaga aataaagt cgaatagaca cccaccatc aaccaattgt actcatgtg gataaagat agagtatct tatggttag ttccatata agtggaccag acacagaac aacagaatg agctagaag ctagctgca actgtttatc ttaacaaga ttaagtcgt ttaattaa tccacgtgt gtaaaaaagt acttgatcc atttaggaa tcttaggtc tagtgagaat ttttttcaa ttttatttta gtctaaatt atgtttcaga acaaaagac atgctgtac agttttatc ccttcagac atgaaaggga acatatatat tccatatata tgttaactc ttcataatt ggaactggc ccatcaatat ggtcaggaat attgtagtc tacatttta agccaattta tttagaaaa aaatttgagc ttaattctt taattttaag agaagtaata ttgtgaacta tttattttta aatatgaca tggacacaca atgtagaatt ttttgccat ttacatgac atatctatta agtggaaaga </p>	Homo sapiens
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126	1762	Galanin Receptor GalR1	NP_001471.1	aggcttttctg aagtctgttt gcacaggtgg catttgcttc caattgtagc tagcgacacg agcttttgaa gctgttcatt atgagataca gtcggtttac ctcaggagtc aattcagttg tgtactgtg acctgggag cagtagtag cactgttgat tcaaatattat cctgtgaaac tggctttata gatttaacaa aacagagtc gagacactg tottaacagt ggaagatgca aataagtttt tgagaataaa actggatttt gaaattttac attagtactt gacaaaagtt ttcattttgc ctggaatgga acctactaaa agagagagtg aaaaaaatc agcgaggttg atgtagataa taatttctat gggaccaaaag actagacaga attcagtaag tcacatgaag taatggatcat gctgtacat aaagcatatt tcaatgtttga tttagatgac attcaaaaa aatcatggga ctgaatatac ctgggtgata ctatcttgta caaatgcattg ctitttcatt aaatttgtaa tgatgttttaa tgaacatttc caccacacat tatttcctct aaaaatgta atttgggtt aaaccatca ccattgaat tcaaatgta ttttcattga caattttata ttgatgtgtg tttacaatga gaaatggca tgaataatatt aaattgtctt gtatcg tgaatgtgtg tttacaatga gaaatggca tgaataatatt aaattgtctt gtatcg	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	SKPGKPRST NLFINLSIA DLAYLFICIP FOATVYALPT WVLGAFICKF IHFFTVSML VSIETLAAMS VDRYVAIVHS RRSLSRVSRL NALLGVGCIW ALSIAMSFPV AYHOGLEHPR ASNQTECWEQ WPDPRKKAY VVCTFVFGYL LPILLICFCY AKVNLHLHKK LKNSKKSEA SKKTAQTIVL VVVVFGISW LPHHIHLWA EGVFPLTPA SFLFRITAHG LAYNSSSVNP IIYAFLSENF RKAYKQVFKC HIRKDSHLSL TKENKSRIDT PPSTNCTHY ggcagcggtg gacagggctg caggagcaag tgaccagagag caggactggg gacagcgctg A atcgccctcg cagcaaccag acctctcgcc gccctcacga tgactacctc tccgactctg cagctgctgc tgcggctctc actgtgcggg ctgctgctcc agagggcgga gacagcgctc aagggcgaga cggcggggga gctgtaccag cgtcgggaac ggtaccgcag gagtgccag gagaccttg cagcgcgga accgcttca ggcctcgct gtacagggtc ctctgatatg taagtctgct gggactatgc tgcacccaat gccactgccc gtcgctcctg cccctggtag ctgcccctgg accacatgt ggctgaggtt ttcgtctctc gccagtgtag cagtgtggc caatggggac tttagagaga ccatacaca tctgtagaacc cagagaagaa tgaggccttt ctggacccaa ggtcatctt ggagcggttg caggtcatgt aactgtctg ctactccctg tctctcgca cactgctgt agccctgctc atcttgagtt tgttcaggcg gctacattgc actagaaact atatacacat caactgttc acgtcttca tgcctgcgag tgcggccatt ctcagccgag acgtctgct acctgacct ggccctacc tbggggacca ggccttgcg ctgtggaaac aggcctcgc tgcctgcgc agggccaga tctgaccca gtactgcgtg ggtgccaact acactggct gctgtggag ggcgtctacc tgacagctc cctggtgctc gtggaggct cagaggagg ccacttcgc tactacctg cctcggctg gggggccc gctgttttg tcatccctg ggtgatgct agtatcgt acagaaac cagtgctg gagcgcaac agtcaaggc catttggtg attatacga ccccatcct catgacctc ttgattaatt tctcatatt tatccgatt ctggcattc tctgtccaa gctgaggaca cggcaaatgc gctgcggga ttaccgctg aggtggctc gctccacgt gacgtggg cccctgctg gtgtccacga ggtggtgtt gctccctga cagaggaa cagccggggg gcccctgct tcgccaagct cggctttgag atcttctca gctcctcca ggccttctg gtcagcgctc tctactgct catcaaca gagggtgag cggagatccg cctggtctg caccactgcc gctgtgcgc cagctgggc gaggagcaac gccagctccc ggagcgcc	Homo sapiens

Accession	Gene	Protein	Species
128	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	Homo sapiens
1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	Homo sapiens
129	Gastrin-Releasing Peptide Receptor	NM_005314	Homo sapiens
1813	Gastrin-Releasing Peptide Receptor	NM_005314	Homo sapiens

Homo
sapiens

NP_005305.1
Gastrin-
Releasing
Peptide
Receptor

130 1813

gacctcctggc cttcaccacac tctgcgtga accccttgc cctctacctg ctgagcaaga
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131 1814

Homo
sapiens

atggagctgc tcaagctgaa ccggagcgtg cagggaaccg gaaccgggccc gggggcttcc A
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cggggtgcac accgagcact ctgcgggtgct cctatctct ccttcaact gctgagctac
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132	1814	Cholecystoki nin B Receptor	NP_000722.1	MELLKLNRSV QGTGPGPGAS LCRPGAPLLN SSSVGNLSCE PPRIRGACR ELELAIRIL P YAVIFLMSVG GNMILIVLG ISRLRLVTN AFLLSLAVSD LLLAVACMPF TLIPNLMTGF IFGTVICRAV SYLGVSVSV STLSVAIAL ERYSAICRPL QARVQWRSH AARVIVATWL LSGLIMPEYP VYTVVQVGP RVLCVHRWP SARVRQTRSW LLLLLFFIP GVMAVAYGL ISRELYLGLR FDGSDSDSQ SRVRNQGGLP GAVHQNGRCS PETGAVGEDS DGCYVQLPRS RPALELTALT APGSGSRP TQAKLAKKR VVRMLLVIV LFFLCWLPVY SANTWRAFDG PGAHRALSQA PISFIHLISY ASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL PDEDPTPSI ASLSRLSYTT ISTLPG	Homo sapiens
133	1834	Glucagon Receptor	NM_000160	ggaatctggca ggcgcgcgaa gacgggcgggt caccggcgcc cgacccgagc gcgcccagag A gacggcgggg agcaagccg accccgagc agcgccgcgc gggccctgag gctcaaaggg gcagcttcag gggaggagac ccactggcc aggaagcccc aggtctgtgt gctctgccac tcagctgcc tcggaggagc gtacacacac accaggatg ccccccctgc agccacagcg cctgccagat gtgggaggca gtagctgcc cagaggcatg ccccccctgc agccacagcg acccctgtcg ctgttctgctg tctgtctggc ctgccagcca caggtccctt ccgtccaggt gatggacttc ctgtttgaga agtggaaact ctacggtagc cagtgtacc acaacctgag cctgctgcc cctccacagg agctgtgtg caacagaacc ttgcacaagt attcctgtg gcgggacacc ccggccaata ccacggccaa catctctgc ccttggtacc tgccttgcca ccacaagtg caacaccgt tcgtgttcaa gagatgggg ccgacgggtc agtgggtgog tggaccccg gggcagcctt ggcgtgatgc ctcccagtc cagatggatg gcgaggagat tgaggtccag aaggaggtg ccaagatgta cagcagcttc caggtgatgt acacagtggg ctacagcctg tccctggggg ccctgtctct cgccttgccc atcctggggg gctcagcaa gtgcaactgc accgcaatg ccatacacgc gaatctgttt gctccttcg tctgaaagc cagctccgtg ctgttcattg atgggctgct caggaccgcg tacagccaga aaattggcga cgacctcagt gtcagcacct ggctcagtga tggagcgtg gctggctgct gctggcgccg ggtgttcabg caatatggca tctgtggccaa ctactgtgg ctgctgggg agggcctgta cctgcacaa cctgtggggc tggccacct ccccgagag agcttcttca gcctctacct gggcatcgcc tgggtgccc ccattgtgtt cgtcgtccc tgggcagtgg tcaagtgtct gttcgagaaac gtccagtgt gtaccagcaa tgacaacatg ggcttctgtt ggatctctg gttcccccgtc ttcctggcca tctgatcaa cttcttctc ttgctccga tegtctcagt gctcgtggcc agctgctggg cagggcagat gcaaccaca gactacaagt tccggctggc caagtccag ctgacctca tccctctgct gggcgtccac gaagtgtgtt ttgcttctg gacggacag cagcccaag gacccctgcy ctccgcaag ctcttctt acccttctt cagctccttc caggccctgc tgggtgctgt ccttactgct ttcctcaaca aggaggtgca gtcggagctg cggcgccgtt ggcacgctg gcgcctggc aagtgctat gggaggagcg gaacaccagc aaccacagg cctcatcttc gcccgccac ggcctccca gcaaggagct	Homo sapiens

134	1834	Glucagon Receptor	NP_000151.1	<p>gcagtttggg aggggtgtgtg gcagccaggga ttcattctgag gagaccacct tggctgtgtg cctccctaga ttggctgaga gcccttctg aacctctgtg ggaccaccagc taggctgga ctctggcacc cagagggtgc gctggacaac ccagacttg agccaccagc taggctgggg gcggggagc caacagcagc cccaccctac cccaccacc cagtggtgct gtctgcgaga ttgggctcc tctccctgca cctgccttct cctgtgtgca gagtgagca gaggagtcca gggggggagt gggggctgtg cctggaactg cgtgccagt tcccacgta tgtcgcaag tcccattgc atggaaatgt cctccaacaa taaagagctc aagtgtcac cgtg MPPCQQRPL LLLLLLACQ PQVPSAQVMD FLFEKWKLYG DQCHNLSLL PPTELVCNR P TFDKYSCWPD TPANTTANIS CPWYLPWHHK VQHRFVKRC GPDGQWRGP RQPWDRDSQ COMDGEIEV QKEVAKYSS FQMYTVGYS LSLGALLAL AILGGLSKLH CTRNAIHANL FASFVLKASS VIVIDGLLRT RYQKIGDDI SVSTWLSLDA VAGCRVAAYF MQYGIYANYC WLLVEGLYLH NLGLIATLPE RSFESLYLGI GWGAPMLEVW PMAVVKLFE NVQCWTSNDN MGFWILRFP VFLAILINFF IFVRIVOLLV AKLRARQMH TDYKFLAKS TLTPLILGV HEWVFAFVTD EHAQGLRSA KLFDLFLSS FQGLLVAVLY CFLNKEVQSE LRRWHHRWL GKVLWEERNL SNHRASSSPG HGPPSKELQF GRGGSQDSS AETPLAGGLP RLAESEPF ttggtgtgtg gtcaccctac aacactttt catatttga tgcctttoca atggttatcc A tgtttgttc attcaggga tatggccctg atcagattaa ctgacatgat gtatatgcaa agccttttga gttcttcaga aaataaaatt atcttattga agactgattg cttataagga acttatata gctaatatag taggcacaat ttttttttga attctctag atgagtccaga acttagtttt gctgtaggta aaattttat ggtcacaatt ctcaggtgtg agaaaaatcc tttccctgat acttatata aatagaggat ataatattt caagtctgga agtagtgaga gaagctggta attctggaca tatgtgaca gtcaaaaagg agctcaggta caggactggt ctaagctgct caagattcag gagacagcca gtacacagag aagctgagga ataataacag atatatctaa aacacttctc taaccttctg tggtaacaag ctcccttaag gggctggatg atgttgtgtt cactttttat caccagcaaa ggctaagata atgtatatag taaatatita gtaaccattt attaaataaa taatatatta agacagata aacaagtata ataaigaac caataagaat gcaccatcta agtcaaaaata gccactttta tccctaacat tgtacctgct ttggctgctg cagaagcaaa cttgttgga ttagacaaa caagctggtg atttaataa ttccaatgta agtcttacc gtattgatga ataactatcc agcactcacc atgaaagtta aagaagcaac acagaaaaag ttctaagtgt gtcccaattt gaaatgatca gataacctat aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac acagtattct ctccaataac tagtttctct atgcattaat gtgtaataac agcaactaca atatttagat aattataaaa accaaggcaa taatttaaaa actgattaac cgttttaotc taacttaagc atggattgga tcagtaagat tgattataa atttgaatgc agtcagttgg attgatttca atttaagtt ttaatttgtt gtagaataat ttttaagtga tatattgtc cagtgttcga gtgtcaaca gtgtgttga aaaggaaaac aaagaatgtt ttgagaatgt gttaattcct taagacaatg gatttaatt ggatctgtgt ttttcattt tcttcattat cattatacat ctgtatgttg gacagaacac taacactaaa tagtttttag aaagtgtttt ttgaagttat ttaaatcata atatcatgac tgacttttga attcaaaaatt aggtgtgac tatccttctt cacttaggaa gagtgtgtg aaagccagac catctgtgga ggtgctacag ttacatgtgg cctcagaat gcgtttggcc tgctctgttt tagcactctg ttggattacc</p>	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	<p>ttggtgtgtg gtcaccctac aacactttt catatttga tgcctttoca atggttatcc A tgtttgttc attcaggga tatggccctg atcagattaa ctgacatgat gtatatgcaa agccttttga gttcttcaga aaataaaatt atcttattga agactgattg cttataagga acttatata gctaatatag taggcacaat ttttttttga attctctag atgagtccaga acttagtttt gctgtaggta aaattttat ggtcacaatt ctcaggtgtg agaaaaatcc tttccctgat acttatata aatagaggat ataatattt caagtctgga agtagtgaga gaagctggta attctggaca tatgtgaca gtcaaaaagg agctcaggta caggactggt ctaagctgct caagattcag gagacagcca gtacacagag aagctgagga ataataacag atatatctaa aacacttctc taaccttctg tggtaacaag ctcccttaag gggctggatg atgttgtgtt cactttttat caccagcaaa ggctaagata atgtatatag taaatatita gtaaccattt attaaataaa taatatatta agacagata aacaagtata ataaigaac caataagaat gcaccatcta agtcaaaaata gccactttta tccctaacat tgtacctgct ttggctgctg cagaagcaaa cttgttgga ttagacaaa caagctggtg atttaataa ttccaatgta agtcttacc gtattgatga ataactatcc agcactcacc atgaaagtta aagaagcaac acagaaaaag ttctaagtgt gtcccaattt gaaatgatca gataacctat aaaagaacat attcatatta tactaacata aacacatata aatgcactta cagcagttac acagtattct ctccaataac tagtttctct atgcattaat gtgtaataac agcaactaca atatttagat aattataaaa accaaggcaa taatttaaaa actgattaac cgttttaotc taacttaagc atggattgga tcagtaagat tgattataa atttgaatgc agtcagttgg attgatttca atttaagtt ttaatttgtt gtagaataat ttttaagtga tatattgtc cagtgttcga gtgtcaaca gtgtgttga aaaggaaaac aaagaatgtt ttgagaatgt gttaattcct taagacaatg gatttaatt ggatctgtgt ttttcattt tcttcattat cattatacat ctgtatgttg gacagaacac taacactaaa tagtttttag aaagtgtttt ttgaagttat ttaaatcata atatcatgac tgacttttga attcaaaaatt aggtgtgac tatccttctt cacttaggaa gagtgtgtg aaagccagac catctgtgga ggtgctacag ttacatgtgg cctcagaat gcgtttggcc tgctctgttt tagcactctg ttggattacc</p>	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	<p> aatacacaaa acaagtttaac ctttgatctt tcaattaaag tatctcaggg acaaaatttg acatacgtct aaacctgtga cgtttccatc taaagaaggc agaaataaaa catggacttt agattcgggtt acataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct gggaaaaat ggcataaagt gctctcctg aacagacatc aaatcactgt tcagccatca acaacagcat ccaatgatg cagggaacc tcccactct gaccttgtct ggaagaatcc gagtgacggt tactttctc ctttttctg tctctggac cttaaagtct tcttcttgt tgaacttca gaagtggaca cagaagaag agaaaggaa aaagctctca aagaagaagc tgctcttaaa acatctgacc ttgccaacc tgttgagac totgattgtc atggcactgg atgggatgtg gaacattaca gtccaatggt atgtctgaga gttactctgc aaagtctca gttatctaaa gcttttctc atgtatgcc cagccttcat gatgggtgtg atcagcctgg accgtccctt ggtatcacg aggcctctag ctttgaag caacagcaaa gtgggacagt ccatggttgg cctggccttg atctcagta gtgtcttgc aggaaccag ttatacatc tcaggatgat tcactagca gacagctctg gacagacaaa agtttctct caatgtgtaa cacactgcag tttttacaa tgggtggcatc aagcatitta taacttttcc accttcagct gctcttcat catcctctt ttcatcagc tgatctgcaa tgcataaatc atcttcccc tgacacgggt ccttcatcag gacccacag aactaaact gaatcagtdc aagaacaata taccacagac acggctgaag actctaaaaa tgacgggtgc atttgcact tcatttactg tctgtggac tccctactat gtctaggaa ttgtgtattg gtttgatcct gaaatgttaa acaggtgtgc agaccagta aatcactctc tcttctctt tgccttttta aaccatgct ttgatccact tatctatga tattttctc tgtga </p>	Homo sapiens
137	1945	Opsin, green-sensitive	<p> VILHDPHEIQ LNQSKNNIPR ARLTKMTV AFATSFVCM TPYVVLGIWY WFDPEMLNRL SDPVNHFFFL FAFINPCFDP LIYGESL atggcccagc agtgagcct ccaaagctc gcaggecgc atccgcagga cagctatgag A gacagcacc agtccagcat cttcacctac accaacagca actccaccag aggcccttc gaaggccga attaccacat cgctccaga tgggtgtacc acccaccag tgtctggatg atctttgtgg tcattgcac cgttttaca aatgggttg tctggcggc caccatgaag ttcaagaagc tgcgccacc gctgaactgg atcctgtga acctggcgt cgtgacctg gcagagaccg tcctgcacc cactatcagc gttgtgaac aggtctatgg ctacttcgtg ctgggccacc ctatgtgtg cctggaggc tacaccgtc cctgtgtgg gatcacaggt ctctgtctc tggccatcat tctctgggag agatgatgg tggctctgaa gccctttggc aatgtgatg ttgatgccaa gctggccatc gtgggeattg ccttctctg gatcgggt gctgtgtgga cagcccgcc catctttggt tggagcaggt actggccca cggcctgaag acttcagtgc gccagaggt gttcagcggc agctctacc cgggggtgca gcttacatg attgtcctca tggtcacctg ctgcaccacc ccaactcaga tcatcgtgct ctgtacatc caagtgtggc tggccatccg agcgggtggca aagcagcaga aagagctcga atccaccag aaggcagaga aggaagtgc gcgcattggt gtgggtatgg tcttggcatt ctgttctgc tggggaccat acgccttctt cgcattgctt gctgtgtgca accctgtgcta cccctccac </p>	Homo sapiens

138	1945	Opsin, green- sensitive	NP_000504.1	MAQWSLQRL AGRHPQDSYE DSTQSIIFTY TNSNSTRGPF EGRNYHIAPR WYVHLTSVM P IFVVIASVFT NGLVLAATMK EKKLRPLNW ILNVLAVADL AETVIASTIS VVMQVYGYFV LGHPMCVLEG YTVSLCGITG LMSLAISWE RWMVVCXKPF NVREDAKLAI VGIAFSWIWA AVWTAPPIFG WSRYPHGLK TSCGPDVFSG SSYPGVOSYM IVMVTCCIT PLSIIVLCYL QVWLAIKRAVA KQKSESTQ KAKEVTRMV VVMVLAFCFC WGPYAFFACF AAANPGYPFH PLMAALPAFF AKSATIYNPV IYVFMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS VSPA	Homo sapiens
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	atgtggaacg cgagccccag cgaagagcgg ggggtcaacc tcacactggc cgacctggac A tgggatgctt ccccgccgaa cgactcgctg ggcgacgagc tgcctgcagct cttccccgcg cgctgctgg cggcgctcac agcaactgc gggcactct tegtgtgtgg tatcgctggc aacctgctca ccatgttgt ggtgtcgcg tcccgagc tgcgcaccac caccacactc tacctgtcca gcatggcctt ctccgactctg ctcatcttcc ttgcgatgcc cctggacctc gttcgctctt ggcagtagcg gccctggaac ttccgggacc tccctgtgca actcttccaa ttcgtcagtg agagctgac ctacgccag ttgctcaaca tcacagcgct gagcgtcgag cgctacttcg ccatctgctt cccactccgg gccaaagtgg tggcaccaaa gggcggggtg aagctggtea tctctgtcat ctggcgctg gcccttctga ggcggcgcc catcttcgtg ctagtcgggg tggagcacga gaacggcacc gaccttggg acaccaaga gtgcgcccc accagatttg cgggtcgctc tggactgctc acggtcatgg ttgggtgtgc cagatcttc ttcttcttc ctgtctctg tctcacggtc cctcacagtc tcacgtggc gaagctgtgg cggaggaggc gcggcgatgc tgcgtgtggg gctcgtctca gggaccagaa ccacaagcaa accgtgaaaa tgcgtgggtg gtctcagcgc ggcgtcaggg tttctctcgc gggctctatc ctctccctgt gccttctccc tctctctga	Homo sapiens
140	1951	Growth Hormone Secretagogue Receptor	NP_004113.1	MMNATPSEEP GFNLFIADLD WDASPGNDSL GBELLQLFPA PLLAGVTATC VALFVVGIAG P NLLTMLVSR FRELRTTNL YLSSMAFSDL LIFLCMPDL VRLMQYRPWN FGDLLCKLFQ FVSECTYAT VITITALSVE RYFAICFPLR AKVWVTKGRV KLVFVIWAV AFCSAGPIFV LVGVEHENG DPWDNECRP TEFVAVRGLL TVMVMVSSIF FFLFVFCITV LYSLIGRKLW RRRRGDVVG ASLRDQNHQ TVMLGGSQR ALRLSLAGPI LSLCLLPSL	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823	agcagccaa gcttactgag gctgtgtgag gagccactg ctgggctcac catggaccgc A cggatgtgg gggccacagt cttctcgctg ttgagccagt taccgacctg attggcgac atgcacccag aatgtgact catcacccag ctgagagagg atgagagtgc ctgtctacaa gcagcagagg agatgcctca caccacctg ggtgcctcg cgacctggga tgggtctgtg tgtggccaa cggcaggctc tggcgagtgg gtcacctcc cctgccccga tttctctct cactcagct cagagtcaag ggtgtgaaa cgggattgta ctatcactgg ctggtctgag ccctttccac cttacctgt ggcctgcctt ggcctctgg agctgtggc tgaggaggaa tcttacttct ccacagtga gattatctac accgtgggc atagcatctc tatttagcc ctctctgtgg ccatcaccat cctgggtgtc ctgaggaggc tccactgcc ccggaactac gtccacacc agctgttccac cacttttacc ctcaaggcgg gactgtgtgt cctgaaggat	Homo sapiens

142	1954	Growth Hormone- Releasing Hormone Receptor	NP_000814.1	MDRRWGAHV FCVLSPLPTV LGHMHPECDF ITQLREDESA CLOAAEMPVN TILGCPATWD P GLICWPTAGS GEWVTLPCPD FFSHFSESG AVKRDCTITG WSEPPFPV ACVPLELLA EESYFSTVK IIVTVGHSIS IVALFVAITI LVALRRLHCP RNVVHTQLTF TFLKAGRVF LKDAALFHS DTDHCSFSTV LCKVSVAAASH FATMTNFSWL LAEAVYLNCL LASTSPSSRR AFWLVLAGW GLPVLFTGTW VSKLAFEDI ACWDLDDTSP YWIIKGPV LSVGVNFGLE LNIIRILVRK LEPAQSLHT QSQYWRLSKS TLFILPFGI HYIIFNLPD NAGLIRLPL ELGLGSFOGF IVALLYCFIN QEVRTISRK WHGHDPPELLP AWRTAKWTT PERSAAKVLTL SMC	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	caggagagaca tacaggattt aagaagccca tcatggagaa gaccttcaat tacagagata A aaaagtittt cttgtggaac agattaacac tagatggcag ataacagact gagagtgag ctgcttctga ctcgattaa aaggagatga gccataactg gggctgctc ttctgccaat gagctccc aattctctct gcctcttaga agacaagatg ggtggtctg agcactatct gcttggtcac tatggccagc cccagctga tgcctctggt ggtggtctg ggtggtctg ggtggtctg ggtggtctg agtagggctc aactgctgg tctgtatgc cgtacggagt gagcggaagc tccacactgt ggggaacctg tacatcgta gccctcgggt ggcggacttg atcgigggtg cgtcgctcat gcctatgaac atcctctacc tctctatgc caagtgtca ctggggcgtc ctctctgct cttttggtt tcatggact atgtggccag cacagctcc atttccagt tctctatct gtgcatgat cgctaccgt ctgtccagca gccctcagg tactttaagt atcgtaacaa gaccgagc tcggccacca ttctgggggc ctggtttctc tctttctgt ggttatctc cattctagc tggaaatcact tcatcgagca gacctgggtg cgcggagag acagtgta gacagacttc tatgatgta cctgggtcaa ggtcatgact gcatcatca actctacct gccacacctg ctcatgctct ggtctatgc caagatctac aaggccgtac gacaacactg ccagcacccg gagtcatca ataggtccct cctctcttc ttagaajta agctgaggcc agagaacccc aagggggatg ccaagaaccc aggggaagag tctcctctgg aggtctgaa	Homo sapiens

aaggaaagcca aagatgctg gtggtggatc tgtcttgaag tcaccatccc aaacccccaa
ggagatgaaa tcccagttg tcttcagcca agagatgat agagaagtag acaactcta
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ataaaagaga gagagaatca gacctgggtg gaactcctt gctctcagg aactatggga
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gaacatgtag ttttacttgg tgtttatgtt gcaatcgtgt ttgtatttat attttaaagc
ttgtgtctaa accacaatat gtatagcaca tggagtgcct gtacaagctg atgttttga
tttgtgttc ctcttgcac gatctgtcaa agtgagatat ttttacctgc ctaaaaatg

144	2120	Histamine H1 NP_000852.1 Receptor	MSLPNSSCLL EDKCEGNKT TMASPOLMPL VGNLYIVSLS VADLIIVGAVV MPNNIYLLM SKWSLGRPLC LFWLSMDYVA STASIFSVEI LCIDRYRSVQ QPLRYLKVRT KTRASATILG AWFLSFLWVI PILGWNHFNQ QTSVRREDKC ETDFYDVTFW KWTALINFY LPTLLMLWFY AKIYKAVRQH COHRELINRS IPSFSEIKLR PENPKGDARK PGKESPEWEL KRKPKDAGGG SVLKSPSQTP KEMKSPVVFES QEDDREVDKL YCEPLDIVHM QAAEAGSSRD YVAVNRSHGQ LKTDEQGLNT HGASEISEDQ MLGDSQSFSR TDSDTTTERA PGKGLRSGS NTGLDYIKFT WKRLRSHSRQ YVSGLHMNRE RKAARKQLGFI MAAFILCWIP YEIFEMVIAF CKNCCNEHLH MFTIWLGVIN STINPLIYPL CNENFKKTFK RIHHS	Homo sapiens
145	2121	Histamine H2 NM_022304 Receptor	ctctcgccct ccaatgactc gagagagggga gatccccagt attgactcc atcagcgaga A tgggagcagg caccagctat ggagagggat acagctcgtt ctccacatga ccaatcctgc atgacaccaa agccaccgc agacagtgc tcggatttca tgcaaaacct gggaagcgga gacctacccc agccccggga ggaagctagc tcttcagggg accgtctgag gactggagtt tgatccatga acctggcttc gaggccttgc tttctctctc tcttcattca taticattcc caacacctta gaagtgttg cttaatttat ttctagaaaa gcagcccaga gtcagtcat gaagccttcc cccccctg gccaaaaaaa aaaaactggac acattttgga tctgttggga gcttgagtc gagtgttgg catagtgtc acattgggag cagagaagaa gcaaccaggg gccctgata ggggactgag ccgtagagtc ccaggatggc acccaatggc acagcctctt cctttgctt gactctacc gcatgcaaga tcaccateac cgtggtcctt gcgtcctca tctcatcac cgttgcggc aatgtggtcg tctgtctggc cgtgggcttg aacgcggcgc tccgcaacct gaccaattgt ttcactgtgt ccttggttat cactgacctg ctctcggc tctgtgtgt gccctctctt gccatctacc agctgtcctg caagtggagc tttggcaagg tcttctgcaa tatctacac agcctggatg tgatgctctg cacagcctcc attcttaacc tcttcattgat cagcctcgac cgttactggt ctgtcatgga cccactgogg tacctgtgc tggtaacccc agttcgggtc gccatctctc tggctttaat tgggtctac tcattatccc tgtctttct gctatccac ctggggtgga acagcaggaa cgagaccagg aagggcaac ataccacctc taagtgcgaa gtccagggtca atgaagtga cgggctgggtg gaggggtgg tcaacttcta cctccgcta ctgactatgt gcatcaccta ctacgcgac ttcaaggtcg ccgggatac ggcagaggg atcaatcaca ttagtctctg gaaggcagcc accatcaggg agcacaagc cacagtga caatgagga cttatcctc tgctgggttc cctacttac cgcgtttgtg taccgtgggc tgagagggga tgatgccatc aatgaggtgt tagaagccat cgttctgtgg ctgggctatg ccaactcagc cctgaacccc atctgtatg ctgcgtgaa cagagacttc cgcaccgggt accaacagct cttctgtgc	Homo sapiens

146	2121	Histamine H2 NP_071640.1 Receptor		aggctggcca accgcaact ccacaaact tctctgaggt ccaacgcctc tcagctgtcc aggaccctaaa gccgagaacc caggcaacag gaagagaac cctgaagct ccaggtgtgg agtgggacag aagtcacgcg cccacagga gccacagaca ggaatagcc ctgaccattg gtgcacagga tgggggcaat gggagggggt gctactgatg ggaatgatta agggagctgc tggttaggtg gtgctgggtt atgtcttagg aactctcat gagcacttg taaacacct ctgtctaat cctcccaacg gccccaag gtagaacta gctcccttt aaaaggagca cattaaaatt ctcagaggac ttggcaagg ccgcacagct ggggcat A1DNLGLL VLPFSAIYQL CKWSFGKVF CNIYTSIDVM LCTASILNLF MISLDRYCAV MDPLRYPLV TPVRVAISLV LIWISITLS FLSIHLGWS RNKTSKNHT TSKCKVQVNE VYGLVDGLVT FYPLLLIMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTIAAVM GAFICWFPY FTAIFYRGLR GDDAINEVLE AIVLWLGYN SALNPILYAA LNRDFTGYQ QLFCCRLANR NSHKTSLRSN ASQLSRQSR EPRQKEKPL KLOWWSGTEV TAPQATDR	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	tgacgacac accatggaat ccccgattca gatcttcgc ggggagcctg gccctacctg A cgcccgagc gctgcctgc ccccaacag cagcgctgg ttcccggt gggcgagcc cgacagcaac ggcagcgccg gctcgagga cgcgagctg gagccgcgc acatcccc ggccatcccg gtcacatca cggcggtcta ctcgtagtg ttgcgtggtg gcttgggtgg caactcgtg gtcagtgtcg gtcacatccg atacaaaag atgaagacag caaccaacat ttacatattt aactggctt tggcagatgc tttagtaac acaaccatgc ccttcagag taaggctac ttgatgaatt cctggccttt tgggagatg ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcaccttg accatgata gctgggacg ctacattgcc gtgtgccacc ccgtgaaggc ttbggaactc cgcacacct tgaaggcaaa gacatcaat atctgcatct ggctgctgc gtcactgtt ggcactctc caatagctct tggaggcacc aaagtcaggg aagacgtcga tgcattagag tgcctctgc agtccaga tgatgactac tcctggtgg acccttcat gaagatcgc gcttcatct ttgccttcgt gatccctgc ctacatca cgtctgcta caccctgatg atcctgcgc tcaagagcgt cctggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggata ccagactggt ggaggtggtg gtggcggtt tctgctctg ctggactcc attcacatat tcatcctggt ggaggtctg gggagcacct cccacagcac agtgcctc tccagctatt acttctgcat cgcttaggc tatacaaca gtacctgaa tccattctc taccctttc ttgatgaaa cttcaagcgg tgttccggg acttctgctt tccactgaag atgaggatgg agcgagagag cactagcaga gtccgaaata cagttcagga tctgcttac ctgagggaca tcgatgggat gaataaacca gtatgactag tctggagat gcttctgac ag NP_000903.1 MESPIQIFRG EPGTCAPSA CLPPNSAWF PGWAEPDSNG SAGEDAQLE PAHISPAIPV P IIITAVYSWF VGLVGNLSV MEVIIRYTKM KTAIYIYFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFIT MMSVDRIYAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAVLGGTK VREDVDIEC SIQFPDDDDYS WWDLFMKICV FIFAFIPVL IIIVCYTIMI IRLKSVRLLS GSREKDRNLR RITRLIVVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFICIALGY TNSSLNPILY AFLDENFKRC FRDCEFPKLM RMERQSTSRV RNTVQDPAYL RDIDGNKPV	Homo sapiens
149	2964	Luteinizing	NM_000233	ggccgccccat gaagcagcg ttctcggcgc tgacgtgctg gaagctgctg ctgctgctgc A	Homo sapiens

sapiens

Hormone/Chor
logonadotrop
in Receptor

agccgcgcgt gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc
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150 2964 Luteinizing NP_000224.1
Hormone/Chor
iogonadotrop
in Receptor

Homo
sapiens

ctagagatgc actgttcaat tcggtacgca ctaggacacat gtggctaaat taaaattaaa
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151 2976 Lysophosphat NM_001401
idic Acid
Receptor
Edg2

Homo
sapiens

152	2976	Lysophosphat NP_001392.1 idic Acid Receptor Edg2	gcatgaacc ccatcattta ctctaccgc gacaaagaa tgagcgccac ctttaggcag atcctctgct ccagcgccag tgagaaaccc accgggccc cagaaggctc agaccgctcg gtctcctccc tcaaccacac catcttggtt ggagtcaca ggaatgacca cctctgtgtt tagaacggaa actgagatga ggaaccagcc gtcctctctt ggaggataaa cagcctcccc ctacccaatt gccaggggca ggtggggtgt gagagaggag aaagtcaac tcatgtactt aaacactaac caatgacagt atttgttctt ggaccocaca agacttgata tatattgaaa attagcttat gtagacaacc tcatcttgat cccatccct tctgaaagta ggaagttgga gctcttgcaa tgggaattcaa gaacagactc tggagtgctc atttagacta cactaactag acttttaaaa gattttgtgt ggtttgtgtc agtcagaaat aaattctggc tagttgaatc caaacactca ttatatata ggtctccctt tttattttt aaaggatacg ttccactbaa taaacaggtt tatgcctatc agcatgtttg tgatggatga gactatggac tgccttttaa ctaccataat tccatttttt cctttacata ggaactgtt aagttggaat tatcttttgt ttagaaagca tgcattgta tgcattgtgc agtatgctt acttaaaag attaaaagga tactaatgtt aaatcttcta ggaatagaa cctagacttc aaagccagta ttgttttagg tcatgaagca acaaatgctc taatcacaat attaaactgt taattaaaat gttgtaacaa gtataaaca ggaatgttaa gtttattacc aaagtatat gattccaaa aaagtcatag aagatgaagc actataatat tgttccata tatttaaat acccaagtac attctaatta ccagtatac agaggaaaat tttogtagtc ttgtaaaat aatataacta tcaagaaaa cttgaaaaat gcagaaatgt ataaaaagc aaaaatgatt actgataata tcaacaacca gaagtaacca cctttaaaa gcaaccccca tgcataccta tatgtgtatt gtatactttt ttacataaat tggagtcata ctgtaaacag tttataagt agatcttttt cattgcaaaa ttgccacatt ttcttatgac attaaaaat ttacaaaac ataattttaa tggctatatt atattccatt taatggatgc aactcagttt atttaaccat tcccatgttg ttaactattt aggtgttttc taattttcat tattataag ttgcagaaa ttggtgt	Homo sapiens
153	3038	G Protein- Coupled Receptor MRG	IFIMLANLIV MVAIYNRRF EPQCFYNESI AFFYNSGKH LATEWNTVSK LVMGLGITVC P WLLRQGLIDT SLTASVANLL AIAJERHITV FRMLHTRMS NRRVAVVIW IWTMAIVMGA IPSVGNIC DIENCSNMAP LYSDSYLVFW AIFNLVTFV MVLYAHIFG YVRQTRMS RHSSGPRNR DTMSLLKTV VIVLGAFIIC WTPGIVILL DCCPQCDVL AYEKFFLLA EFNSAMNPII YSYRDKEMSA TFRQLCCQR SENPTGPTES SDRSASSINH TILAGVHSND HSV ttttgtattt gttgcacccct agtctgttc atttcttct cctcagctga cattggagc A atagcagtcg atgatgccc cagacagact gcctgagact cagccctcg gagaaacga gatttcctta ttttccaggt caagtcctgc cagccataga aaggacttct tigggtgcaa ctgctgtgaa atgcctgctt tggaaatctc agtgcctct tgcactgtc tgagcccagg gaaatgccat actgtggcac tgcctgcatcc tgatggcta cccaagatg cccaggactg gtttgaaaga gatgagacat gccaggtgc gtggctcac cttgtaatcc agcacttggg gaggtcaagg cagtggatca caaagtcaga gttgagacca gccaggccaa tatggtgaaa acccatctc tactaaaaat acaaaaaatt agccgggcaa tgggtgtggg tgcctgtagt tccagctagt caggaggccg aggcaggaga atcgttgaa cctgggaagt ggaggtcca gtgagctgag atgcgccac tgcactccag cctgggtgac agagtgagac tccaaactcaa	Homo sapiens

154	3038	G Protein-Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaagaga tgagacacta gtgtctcatg agtagaacct ggaccagaca caaatctcca ttcccaatgt ttagtgcctc attagtccc acaacaaga tattgggtct atgtgggtag gcctggggca tctgtacaa caggagatgc tttaggggag ggagacaga tcacaaatc atggagagct atttgcagag cagatactcc catccactct gatattagat taattgttcag ctgttccataa aaagcacacc caacaatggg tgttctatc cagcctagga aaatgtagag gcaagggttc tgaggccaga ggacaccact agatggacca ctgtcctcga ctgtgatgtt gtggccact caggtccacg caccacatgg tctgggggaa aatttgcctgg ttcagccaga gggctggatg gacagtgttt gctgagtcac agatatctct ctcatgtagc ctttgtctcc acagtgtga ccaggaggga cagaacccaa accctgtatc tcagctctgt ggcgtcttcc ttcaaaatga gacgaatga accatacata tgcagatgag catggcagtg ggacagcagg cctgcccctt gaatactatt gcccccaagg ctgtgctggg ctccctctgt gggtcttat tgaatggcac tgtctctcgg ctgcttctgt gtggggccac gaatccctac atggtatata tctccacct ggtcgtctgt gactgatct atcttctgtg ctcgccagtg gggtctctac aggtgactct gctaacctat catggagtgog tgtttttat cctgatttc ctggccatat tgtctccctt ctctcttgag gtgtctctct gtctcctggt ggccatcagc acagagcggg gtgtgtgtgt cctcttccc atctgttaca gatgccaccg cccaaaaatg acatctaag ttgtctgac cctcatctgg ggcctgcctt ttgcatcaa catagtaaaa tcactttcc taacttaactg gaaacatga aggcattgt tcatattct taaactttct gggctctcc atgctatctt ttcacttgg atgtgtgtgt cgagctgac tctactctt agattctgt gtgtctcca gcagcaaaag gccaccagg tctatgcgtt ggtgcagatc tcggccccc tggtctact ctgggcccta cccctgagcg tggacccct cataacagat ttcaaaatgt ttgtcaccac ctctattta atttcttgt tctctattt aaacagcagc gccaaacct tcaattattt ctttgtggg agcctcagaa agaaaaggct gaaggaatct ctcagagtga ttctccaag ggcgttagca gataagccag aggtggggag gaacaaaaag gcagctggga tggacccaat ggagcaacca cactctactc agcatgtgga gaactctt cccaggagc acagggtcga tgtggaaca taatttccc catctgagct ggggaattgt acacatagta accagcctg ttctgcatca taaggctgt gcatcaaatc aatgctttat tctaataag ttcagcttcc atggacttcc aaaaacccc cttgctgttt gtggttgga gagacattaa ctctctctt aggcagtaag cccagtttga atgtgtcca gtcccaacga tgaggggaaat gggacccagt gagacttcc tggtaacctgt ggaatccaaa taaagaccat acaaaggcat gaattc MWMGKICWFS QRAGWTVFAE SQISLSCSLC LHSQDEAQN PNLVSLCGV FLQNETNETI P HMQMSMAVGQ QALPLNIAP KAVLVSLCGV ILNGTFWLL CCGATNPYMV YILHLVADV IYLCCSAVGF LQVTLITYHG VWFIPDFLA ILSPFSEFVC ICLLVAISTE RCVCVLFPIW YRCHRPKYTS NVVCTLIWGL PFCINIVKSL FLTYWKHVKA CVIFLKLGL FMAILSLVMC VSSLTLIRF LCSQQQKAT RYAVVQISA PMFLMALPL SVAPLITDFK MFVTTSYLIS LFLIINSSAN PIYFFVGSLL RKRLKESLR VILQRLADK PEVGRNKAA GIDPMEQPHS TQHVNLILPR EHRVDVET atgagcatcc aaagaagta tctggaggga gatttctct tctctggag cagcagcagc A ttctacgga cctcgttgga gccccagctc ggatcgccc tctgacagc aatgaatgct tcgtgtctgc tgcctctgt tcagccaaca ctgcctaag gctcggagca cctccaaagcc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> atgagcatcc aaagaagta tctggaggga gatttctct tctctggag cagcagcagc A ttctacgga cctcgttgga gccccagctc ggatcgccc tctgacagc aatgaatgct tcgtgtctgc tgcctctgt tcagccaaca ctgcctaag gctcggagca cctccaaagcc </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	<p>cctttcttca gaaaccagag cagcagcgcc ttctgtgagc aggttctcat caagcccgag attttcctgt cctggggcat cgtcagctcg ctggaacaca tcttggttat cctggccgtg gtcaggaagc gaaacctgca ctcocgatg tacttcttc tctgcagcct ggcggtggcc gacatcctgg taagtgtgc caatgccctg gagaccatca tgcagccat cgtccacagc gactacctga ccttcgagga ccagtttacc cagcacatgg acaacatctt cgcactccatg atctgcattc cctgggtggc ctcactctgc aacctctgg ccatgcctg cgcaggttac gtcaccatct ttaacgcct cctgaaccac agcatcatga cgtgaggaa ggcctcacc ttgatcgtgg ccatctgggt ctgctgcggc gtctgtggcg tgggtttcat cgtctactcg gagagcaaaa tgggtcattgt gtccctcacc accatgttct tgcctcatg gctccctcatg ggcaccctct acgtgcacat gtccctcttt gcgcggctgc agtcaagcg catagcagca ctggcaccctg cgaagggggt ggcceacag caacatcat cagtgaagg ggcagtcacc atcaccattc tctggggcgt gtctactctc tgcctggccc ccttcttct ccaactggtc ctcatcatca cctgccccac caaccctac tgcactgct acactgcaca ctccaacacc taactggctc tcactcatgt caactcctgc atcgaccac tcactaagc ttccgggagc ctggaattgc gaaacacct tagggagatt ctctgtggt gcaacggcat gaacttggga tag</p>	Homo sapiens
157	3058	Melanocortin NM_005912 4 Receptor (MC4R)	<p>FLRTLEPQL GSALLTAMNA SCLPSVQPT LPNGSEHLOA P PFPSNQSSA FCEQVFIKPE IFLSLGVSL IENILVILAV VRGNLHSPM YFFLCSLAVA DMLVSVSNAL ETIMTAIVHS DYLTFEDQFI QHMDNIFDSM ICISLVASIC NLLAIAVDYR VTIFYALRVH SIMVRKALT LIVAIWVCCG VCGWVFVYS ESKMIVICLI TMFFAMMLLM GTIYVHMLF ARLHVKRIAA LPPADGVAPQ QHSCMKGAVT ITILLGVTF CWAPFFLHLV LIITCTPNPY CICTAHENT YLVLMCNVS IDPLIYAFRS LEARNTFREI LCGNGMNIG atggtgaact caaccacccg tgggatgcac acttctctgc acctctgga cgcagcagcagt A tacagactgc acagcaatgc cagtgcagtc cttggaaaag gctactctga tggagggtgc tacgagcaac ttttgtctc tcttgagtg tttgtgactc tgggtgctcat cagcttgggtg gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acctatgtac tttttcact gcagcttggc tgtggctgat atgctggtga gegtcca aa tggatcagaa accattatca tcacctatt aaacagtaca gatacggatg cacagagttt cacagtgaat atgataatg tcattgactc ggtgatctgt agtccctgc ttgcattccat ttgcagcctg ctttcaatg cagtggacag gtaatttact atctctatg ctctccagta ccaaacatt atgacagtta agcgggttg gatcatcata agttgtatct ggcagcctg caggtttca ggcattttgt tcattattta ctcagatagt agtgcgtgca tcactgcct catcaccatg ttcttccca tgcggctct catggttct ctctatgtcc acatgttct gatggccagg cttcacatta agagattgc tgtctctccc ggcactgggt ccatccgca agtgccaat atgaaggagg cgattacctt gaccatctg atggcgctt ttgtgtctg ctgggcccca ttcttccctc acttaattt ctacatctt tgcctcaga atccatttg tgtgtgcttc atgtctcact ttaacttga tctcactatg atcatgtga attcaatcat cgtccctctg atttatgcac tccggagtca agaactgagg aaacacctca aagagatcat ctgttgcctat ccccgggag gccttctgga cttgtctagc agatattaa</p>	Homo sapiens
158	3058	Melanocortin NP_005903.1 4 Receptor	<p>ENILVIVAIA KKNLHSPMY FFICSLAVAD MLVSVNGSE TIITLLNST DTDQSFVN YEQLFVSPEV FVTLGVISLL P</p>	Homo sapiens

159	3059	Melanocortin NM_005913 5 Receptor (MC5R)	(MC4R)	IDNVDSVIC SLLASICSLS LSIADVRYFT IFYALQYHNI MTVKRVGIII SCIWAACVTS GILFIIYSDS SAVICLITM FETMLALMAS LYVHMFELMAR LHIKRIAVLP GTGAIRQGAN MKGAITLIL IGVEVVCWAP FFLHLIFYIS CPQNPYCVCF MSHENLYLIL IMCNSIIDPL IYALRSQELR KTFKEIICCY PLGLCDLSS RY atgaattctt catttcaact gcatttcttg gatctcaacc tgaatgccac agagggcaac A ctttcaggac ccaatgtcaa aacaagtctt tcaccatgtg aagacatggg catgtctgtg gagggttttc tcaacttggg tgcatacagc ctcttgagga acatcttggc cataggggcc atagtgaaga acaaaaactt gcactcccc atgtacttct tegtgtgag cctggcagtg gggacatgc tggtagagcat gtccagtgc tgggagacca tcaactacta cctactcaac aacaagcacc tagtgatagc agacgccttt gtgcgcaca ttgacaatgt gtttgactcc atgatctgca ttccgtggtt ggcatacatg tgcagcttac tggccatggc agtggatagg taggtcacca tctttacgc cctggcgtac caccacatca tgcaggcgag gcgtcaggg gcatcatcg cggcatctg ggetttctgc acgggtgcg gaattgtctt catctgtac tcagaatcca cctacgtcat cctgtgctc atctccatgt tcttcgtat gctgttctc ctgggtgttc tgtacataca catgttctc ctggcgaggga ctacgtcaa gggatcgcg gctctgccg gggccagctc tgcggcgag aggaacagca tgcaggggcg ggtcacgctc accatgtgc tggcggtgtt taccgtgtgc tgggccccgt tcttcttca tctacttta atgctttctt gcccacgaa cctcactgc tctcgtctc tgtctcactt caatatgtac ctcatactca tcatgtgtaa ttcgtgtatg gacctctca tatatgctt cgcagccaa gagatggga agacctttaa ggagattatt tgcgtgcgtg gttcaggat cgcctgcagc ttccccagaa gggattaa	Homo sapiens
160	3059	Melanocortin NP_005904.1 5 Receptor (MC5R)		IVNKNLHSP MYFFVCSLAV ADMLVMSA WETITILN NKLHVIADAF VRHIDNVFDS MICISVASM CSLAIAVDR YVTIFYALRY RHIMTARRSG AIIAGIWAFC TGCGIVFIFY SESTYVILCL ISMFFAMLEL IVSLYIHMFL LARTHVRRIA ALPGASSARQ RTSMOGAVTV TMLLGVTVC WAPFFLHLTL MLSCPQLYC SREMSHFNNY LILMCNSVM DPLIYAFRSQ EMRTEKEII CCRGFRIACS FPRRD ggagagggtg tgagggcaga tctgggggtg ccagatgga aggagggagg catgggggac A accgaaggc cctgggcagc acctgaact aagcagaca cctggagggg aagaactgtg gggacctgga ggcctccaac gactccttc tgcctcttg acaggactat ggtgtgacg ggatcccca gaagacttct gggctccctc aactccacc ccaagccat cccccagctg gggtggctg ccaaccagac agagccccg tgcctggagg tgcctatctc tgacgggctc ttctcagcc tggggctggt gacttgggtg gagaacgcg tgggtgggtg caccatgcc aagaacgga acctgcactc acctatgac tgcctcatct gctgcctggc cttgtcggac ctgctgtga gggggagcaa cgtgtggag acggccgtca tctcctgct gaggccggt gcactgggtg cccgggtgc ggtgtgcag cagctggaca atgtcatga cgtgatcac tgagctcca tctgttccag cctctgtctc ctgggcgcca tgcctgtgga cgcctacatc tccatcttct acgactgag ctaccacagc atcgtgacc tgcggcgggc gggcaagcc gttgcggcca tctgggtggc cagtgtctgc ttccagcagc tcttcatcgc ctactacgac caggtggcg tctgtgtg cctcgtggtc ttcttctggt ctatgtgtg gctcatggcc gtgtgtacg tccatgct ggcggggg tgcagcagc cccagggcat cgcgggctc	Homo sapiens
161	3061	Melanocortin NM_002386 1 Receptor (MC1R)		ggagagggtg tgagggcaga tctgggggtg ccagatgga aggagggagg catgggggac A accgaaggc cctgggcagc acctgaact aagcagaca cctggagggg aagaactgtg gggacctgga ggcctccaac gactccttc tgcctcttg acaggactat ggtgtgacg ggatcccca gaagacttct gggctccctc aactccacc ccaagccat cccccagctg gggtggctg ccaaccagac agagccccg tgcctggagg tgcctatctc tgacgggctc ttctcagcc tggggctggt gacttgggtg gagaacgcg tgggtgggtg caccatgcc aagaacgga acctgcactc acctatgac tgcctcatct gctgcctggc cttgtcggac ctgctgtga gggggagcaa cgtgtggag acggccgtca tctcctgct gaggccggt gcactgggtg cccgggtgc ggtgtgcag cagctggaca atgtcatga cgtgatcac tgagctcca tctgttccag cctctgtctc ctgggcgcca tgcctgtgga cgcctacatc tccatcttct acgactgag ctaccacagc atcgtgacc tgcggcgggc gggcaagcc gttgcggcca tctgggtggc cagtgtctgc ttccagcagc tcttcatcgc ctactacgac caggtggcg tctgtgtg cctcgtggtc ttcttctggt ctatgtgtg gctcatggcc gtgtgtacg tccatgct ggcggggg tgcagcagc cccagggcat cgcgggctc	Homo sapiens

162	3061	Melanocortin NP_002377.2 1 Receptor (MC1R)	<p>cacaagagggc agcgcccggt ccaccagggc ttggcctta aaggcgctgt caccctacc atcctgtgg gcaattttct cctctgtgg ggcctcttct tccctgatct cacactcatc gtcctctgcc ccgagcacc ccggtgcgc tgcattctca agaactcaa cctctttctc gccctcatca tctgcaatgc cactatgac cccctcatct agcctttcca cagccaggag ctcccgagga cgctcaagga ggtgctgaca tgcctctggt gagcgcggtg cagcgctttt aagtgtctg ggcagagga ggtggtgata ttgtgtggtc tggttcctgt gtgacctgg gcagttcctt acctccttgg tcccgtttg tcaagagga tggactaaat gatctctgaa agtgttgaag</p>	Homo sapiens
163	3079	Melatonin Receptor type 1a NM_005958	<p>MAVQSQRRLL LGSNSTPTA IPOLGLAANO TGARCLEVSI SDGLFSLGL VSLVENAIWV P ATIAKRNHL SPMYCFICCL ALSDLLVSGS NVLEFVILL LEAGALVARA AVLQQLDNVI DVITCSSMLS SICFLGATAV DRYISIFYAL RYHSIVTLPR ARQAVNAIWV ASVWFSLFI AAYDHRVAVLL CLVFFFLAML VLMAVLYVHM LARAGQHAQG IARLHKRQRP VHQGFGLKGA VLTILIGIF FLCWGPFFLH LTLIVLCPEH PTCGIFKNE NLFALILCN AIIDPLIYAF HSQELRRTLK EVLTCSW</p>	Homo sapiens

164	3079	Melatonin Receptor type 1a	NP_005949.1	<p>cacaaccaca accaaccacca caaacctttc agctggcaga gttagcattg ggtagctata ctcatgggtca taaatgtttg ccgctctata ttacaagtgtg tgcatagaac cagataaaga actaaatcat agccgggga cagtgcgtca cactgtaac ctgacactt tggagggtg aggtgggagc atcaactgag ttcaaggagt ttgagaccac ctggggcaac atgatgaaat cccatctcta aaaaaataca aaaaattatc tgggcatggt gcacacgcct gtaatccacg ctactcagga gactgagta ggagaaatccc ttgagcccca gagcagagg ttgtgtgag ccgagatcgc gccagtagat tccaacttag gctacagaat gagactctgc ccaaaaaa aaaaaaa</p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p>AGNIFVWSLA VADLVVAIYP YPLVLSIFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLTLAVAL PNLRACTLQY DPRIYSCTEFA QSVSSAYTIA VVHFELVPM IIVIFCYLRI WILVLQVROR VKPDRKPKLK PQDFRNFVTM FVFLFAIC WAPLNFGLA VASDPASMPV RIPEWLFVAS YMYAFNSCL NAILYGLINQ NFRKEYRRII VSLCTARVFF VDSSNDVADR VKWKPSPLMT NNNVVKVDSV</p>	Homo sapiens
				<p>acgcagctg ggcaggaag agagcgcgcg gctcagtagt gcgcgcgcgc tgcgctgtc A cggggccgcg cgggtggccaa agcacagcgc gggagagctct gcgatgtcag agaacggctc cttcgccaac tctgcgagg cggcggggtg ggcagtgcgc cgggctggt cggggctggtg cagcgcgcg cctccagga cccctcgacc tccctgggtg gctccagcgc tgcctgggt gctcctcgc accacgcgcg tggacgtcgt ggcaaacctc ctggtgatcc tctcctgct caggaaccgc aagctcogga acgcaggttaa ttgttcttg gtgagtctg cattggctga cctggtggtg gcttctacc cctaccgctc atctctctg gccatctct atgaogctg ggcctggggg gaggagcact gcaaggccag cgccttctg atggcctga gcgtcatcgg ctctgtcttc aatatactg ccatcgccat taacgcgtac tgcatactct gccacagcat ggcctaccac cgaatctacc ggcgtggca caccctctg cacatctgct tcatctggct cctaaccgtg gtggccttgc tgcaccaatt cttgtgggg; tccctggagt acgacccag catctattcc tgcaccttca tccagaccgc cagcaccag tacacggcgg cagtgtggt catccacttc ctcctcccta tgcctgtcgt gtccttctg tacctgcgca tctgggtgct ggtgcttcag gccgcagga aagccaagcc agagagcagg ctgtgctga agccacgca cttgaggagc ttcttaacca tgtttgtggt gttgtgac ttgcatct gctgggtctc acttaactgc atcgccctcg ctgtggccat caaccccaa gaatggctc cccagatccc tgaggggcta ttgtcacta gctacttact ggcttattc aacagctgcc tgaatgccat tgtctatggg ctcttgacc aaaacttccg cagggaatac aagagatcc tcttggcctc ttggaacca cggcactgca ttcaagatgc tccaagggc agccacggc aggggtgga gagccagct ccacccatca ttggtgtgca gcaccagga gatgctctt agcctggatc tgaggccac cagcagcatg acaactcat gaaatgggtg gagagagtct gctgcaagg tgaggccag cagcctgtg gccacactg tctgttggc atcacagccc caagctggg ggaattcat gctgggacaa gcagccatc aagccatgg gttcaggtg atccagaga tgctcacagg ccacaggacc tggaaaacac tcttgggtgt gtcttgggga ttgtgtgac acaagacca ggaagagaca gaatgaggaa aggcctgggg cagaagagcc caactcttc tcatagtga cctcatcct cctgccttgg cctcctggt gcttctccc ctccccca gcattggcagg atctcttct gttagcaagg atgaagaga gaggtagta ggaactgaac</p>	

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttgttaacta caaggcctc aggtggggca ggtcagagg gc</p> <p>VILSVLRNRK LRNAGNLVVRP GWSAGSARP SRTPRPFWA PALSAVLIVT TAVDVVGNLL P</p> <p>GLSVIGSVFN ITAIAINRYC YICHSMAYHR IYRRWHTPLH ICLWLITVW ALLPNFFVGS</p> <p>LEYDPRIYSC TFIQTASTQY TAAVVIHFL LPIAVVSFCY IRIWLVLOA RRAKAPESRL</p> <p>CLKPSDLRSF LTMFVWFVIF AICWAPLNCI GLAVAINPQE MAPQIEGLE VTSYLLAYFN</p> <p>SCLNAIVYGL LNQNERREYK RILLALNPR HClQDASKGS HAEGLOSPAP PIIGVQHQAD</p> <p>AI</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>tggttgctgt ctggacctgg ctgctgctc tgagctgct gggagatctt aacgatcccc A</p> <p>aggagcaaca tggggcccac cctagcggtt cccacccct atggctgtat tggctgtaag</p> <p>ctacccagc cagaataacc accgctcta atcatctta tgtctgcgc gatggttacc</p> <p>accatcggtg tagacctaat cggcaactcc atggtcattt tggctgtgac gaagaaacag</p> <p>aagtcocgga atcttgcaa catcttcgtg gtcagtctct ctgtggcga tatgtggtg</p> <p>gccatctacc catacccttt gatctgcat gccatgcca ttgggggctg ggtctgagc</p> <p>cagttacagt gccagatggt cgggttcate acaggctga gtgtggtcgg ctcacatctc</p> <p>aacatcggtg caatcgctat caacggttac tgctacatct gccacagcct ccagtacgaa</p> <p>cggatcttca gtgtgcgcaa tacctgcatc tacctggica tcaacctggt catgaccgtc</p> <p>ctggctgtcc tgcccaacat gtacattggc accatgagat acgatcctcg caactaac</p> <p>tgcatcttca actatctgaa caacctgtc ttcactgta ccatcgctg catccactc</p> <p>gtctccctc tctcatcgt gggtttctgc tacttgagga totggacca agtctggtg</p> <p>gccgtgacc ctgcaggga gaactctgac aaccaacttg ctgaggttcg caatttctta</p> <p>accatgtttg tgatcttct cctcttgcga gtgtgctggt gccatataa cgtgctcact</p> <p>gtcttggtg ctgtcagtc gaaggagatg gcagggaaga tcccacactg gctttatct</p> <p>gaagcctact tctagccta cttaacagc tgcctcaacg ctgtgatcta cgggtcctc</p> <p>aatgagaatt tccgaagaga atactggacc atcttccatg ctatgcgga cctatcata</p> <p>ttcttccctg gccatcatg tgatattcgt gagatgcagg aggcccgtag cctggcccg</p> <p>gccgtgccc atgtctcga ccaagctcgt gaacagacc gtgccatgc ctgtcctgct</p> <p>gtggaggaaa cccgatgaa tgtccggaat gtccatctac ctggtgatgc tgcagctggc</p> <p>caccccgacc gtgctctg ccaacctaa gccatcca gatcctctc tgctatcgc</p> <p>aatctgctct ctaccacca caagtctgtc tttagccact ccaaggctgc ctctggtcac</p> <p>ctcaagctb tctctggca ctccagcct gccctggtc acccaagtc tgcactgtc</p> <p>taccctaagc ctgctctgt ccatttcaag ggtgactctg tccatttcaa ggtgactct</p> <p>gtccatttca agctgactc tgttcattc aagcctgctt ccagcaacc caagcccatc</p> <p>actggccacc atgtctctgc tggcagccac tccaagtctg ccttcagtgc tgcaccagc</p> <p>cacctaaac ccaataagc agctaccagc catgctgagc ccaccactgc tgactatcc</p> <p>aagcctgcca ctaccagca cctaagccc gctgctgctg acaacctga gctctctg</p> <p>tcccatggc ccgagatccc tgccattgccc caccctgtgt ctgacgacag tgacctcct</p> <p>gagtcggcct ctagccctgc cgctggggccc accaagctg ctgccagcca gctggagct</p> <p>gacacctag ctgaccttcc tgacctact gtactacta ccagtaccaa tgattaccat</p> <p>gatgtcgtgg ttgttgatgt tgaagatgat cctgatgaaa tggctgtgtg aaaaatgctc</p> <p>tgttaggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP YGCIGCKLPQ PEYPALIIF MFCAMVITIV VDLIGNSMVI LAVTKNKKIR P NSGNIFFVSL SVADMVIAIY PYPLMLHAMS IGGWDSQLQ QCMVGITGL SVGSIFFNIV AIAINRYCYI CHSLOYERYI SVRNTCIYIV ITWIMTVIAV LPNMYTCTIE YDPRTYTCTIF NYLNNPVFTV TIVCIHFVLP LLIVGFYCYVR IWKVLAARD PAGQNPQNQL ABEVRFELTMF VIFLFAVCW CPINLVTLV AVSPKEMAGK IPNWLXLAAY FIAYFNSCLN AVIYGLNEN FRREYTWIFH AMRHPPIIFP GLISDIREMQ EARTLARARA HARDOAREQD RAHACPAVEE TPMNVNRVPL PGDAAAGHPD RASGHPKPHS RSSAYRKSA STHKSVFESH SKRASGHLKP VSGHSHKPSG HPSATVVPK PASVHFKGDS VHFKGDSVHF KPDSVHFKPA SSNPKPITGH HVSAGSHSKS AFSAAATSHPK PIKPATSHAE PTTADYPKPA TTSHPKPAAA DNPELSASHC PEIPALHPV SDDSDLPESA SSPAAGPTKP AASQLESDTI ADLPDPTVVT TSTNDYHDVV VVDVEDDDE MAV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acaaaagcct ccagcttgta gaggcggtcg tggaggaccc agaggaggag A acgaagggga aggaggggtt ggtgaggag gcaaaagcct tggacgacca ttgttggga ggggcaccac tccgggagag gggcgctgg gcgtcttggg ggtgcgcgcc gggagcctgc agcgggacca ggttgggaac gggctggga ggttgggac ctgctctca ccaccatggt cgggctcctt ttgtttttt tccagcgtat ctttttggag gtgtcccttc tocccagaag ccccggcagg aaagtgttc tggcaggagc gtctctcag cgtcgtgtgg ccagaatgga cggagatgtc atcattggag cctcttctc agtccatcac cagcctccgg ccgagaaaagt gcccagagg aagtgtggg agatcaggga gcagtatggc atccagagg tggaggccat gttcccaacg ttggataaga tcaacgcgga cccggtctct ctgccaca tcacctggg cagtgaatc cgggactcct gctggcactc ttccgtggct ctggaaacaga cgaatgagtt cattaggagc tctctgattt ccattcgaga tgagaaggat gggataaac ggtgtctgcc tgacggccag tccctcccc caggcaggac taagaagccc attgaggag tgatcgggtcc cggctccagc tctgtagca ttcaagtga gaacctgtct cagctctctg acatcccca gatcgttat tcaagccaaa gcattgacct ggtgacaaa actttgata aatacttct gagggttctc cctctgaca ctttgcaggc aaggccatg cttagacatg tcaaacgtta caattggacc tatgtctctg cagtccacac ggaagggaat tatggggaga gggaaatgga cgctttcaaa gactgggtg cccaggagg cctctgtatc gccattctg acaaaatcta cagcaacgct ggggagaaga gctttgaccg actctgctg aaactccgag agaggcttcc caaggctaga gtgtgtgtct gcttctgtga aggcagaca gtgcaggac tctgagcgc catgcccgc ctggcgctg tggcgagtt ctactcatt ggaagtatg gatgggcaga cagagatgaa gtcatgag gtatgaggt ggaagcaac gggggaatca cgataaagt gcagtctca gaggtcaggt cattgtatga ttattctgt aaactgaggc tggacactaa cacgaggaat cctgtgtcc ctgagtctg gcaacatcg ttccagtgcc gcttccagg acaccttctg gaaaatccc actttaaacg aatctgaca ggcaatgaaa gcttagaaga aaactatgtc caggacagta agatggggtt tgtcatcaat gccatctatg ccatggcaca tgggctgcag aacatgcacc atgcccctctg cctggccac gtgggctctt gogatgccat gaagcccatc gacggcaga agctgctgga ctctctcatc aagtcctcat tcaattggagt atctggagag gagggtgtgt ttgatgagaa aggagacgct cctggaaagt atgatcat gaatctgcag taaactgaag ctaactgcta taaactgcta cactgtgaa cctggcatga aggagtgctg aacattgatg attacaaaat ccagatgaac aagatggag tggcgcggtc	Homo sapiens

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Glutamate Receptor 1	171	3094	Metabotropic NM_000839	KVPERKCGEI	REQYGIQORVE	AMFHTLDKIN	ADPVLTPNT	LGSEIRDSCW	HSSVALEQSI	sapiens
Glutamate Receptor 2				EFIRDSLISI	RDEKDGINRC	LPDQSLPPG	RTKKPIAGVI	GPSSSSVAIQ	VQNLIQLFDI	
				PQIAYSATSI	DLSDKTYLKY	FLRVPSDTL	QARAMLDIVK	RYNWTVSAV	HTEGNYGESG	
				MDAFKELAAQ	EGLCIAHSBK	IYSNAGEKSF	DRLLRKLDER	LPKARVAVCF	CEGHTVRGLL	
				SAMRRLGVVG	EFSLIGSDGW	ADRDEVIEGY	EVERANGGITI	KLOSPEVRSE	DDYFLKLRLD	
				TNTRNPWFPE	FWQHREQCRL	PGHLLLENPF	KRICTGNESL	EENYVQDSKM	GFVNAIYAM	
				AHGLQNMHHA	LCPGHVGLCD	AMKPIDGSKL	LDFLIKSSFI	GVSEEVWF	EKGDPAGRYD	
				INNLYQTEAN	RYDYVHVGTW	HEGVLNIDDDY	KIQMNKSGV	RSVCSEPCLK	GOIKVIRKGE	
				VSCCWICTAC	KENEYVQDEF	TCXACDLGWM	PNADLTGCEP	IPVRYLEWSN	IESIIAIAFS	
				CIGLIVTLFV	TLIFVLYRDT	PVKACSSREL	CYIILAGIFL	GVVCPFTLIA	KPTTSCYLO	
				RLIVGLSSAM	CYSALVTKTN	RIARILAGSK	KKICTRKPRF	MSAWAQVILIA	SILISVQLTL	
				VVTLLIMEPP	MPILSYPSIK	EYVILICNTSN	LGWVAPLGN	GLLIMSCTYY	AFKTRNVNPA	
				FNEAKYIAFT	MYTTCIIWLA	FVPIYFGSNY	KIITTCFAVS	LSVTVALGCM	FIPKMYIIIA	
				KPERNVRSFA	TTSDVVRMHV	GDGKLPGRSN	TEINIFRRKK	AGAGNANSNG	KSVSWSEPGG	
				GQVPGQHWM	HRLSVHVKTN	ETACNQTAVI	KPLTKSYQGS	GKSLTFSDTS	TKTLYNVEEE	
				EDAQPIRFS	PGSPSMVVRH	RVPSAATPP	LPPHLLTAET	PLFLAEPALP	KGLPPPLQOQ	
				QQPPFQQKSL	MDQLQGVSN	FSTAIPDFHA	VLAGPFGPN	GLRSLYPPPP	PPQHLMQLPL	
				QLSTFGEELV	SPPADDDDD	ERFKLLQEVY	YEHEREGNT	EDELEEEEEE	LQAASKLTPD	
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				gccccaacac	caccggctc	tgtgacgga	tggggccagt	taacggggcg	cgcccttaca	
				aggactttgt	gctcaacgtc	aagtttgatg	ccccctttg	cccagctgac	accacaatg	

172	3094	Metabotropic NP_000830.1 Glutamate Receptor 2	<p> aggtccgctt tgaccgcttt ggtgatggtta ttggccgcta caacatcttc acctatctgc gtgcaggcag tggcgcttat cgctaccaga aggtgggcta ctgggcagaa ggcttgactc tggacaccag cctcatccca tggcctccac cgtcagcggg cccctggcc gctctcgt gcaatgagcc ctgcctccag aatgaggtga agagtgtga gccgggcgaa gctcgtgct gctctgcat tccgtgccag ccctatgagt accgattgga cgaattcact tgcgtgatt gtggcctggg .ctactggccc aatgccagcc tgaatggctg cttcgaactg cccagaggt acatccgtg gggcgatgcc tggcgtggg gaactgtac catcgctgc ctgggtgcc tggccacct gtttgtgtg ggtgtctttg tggcgcaaa tggcacacca gtggtcaagg cctcaggtcg ggagctctgc tacatctgc tgggtggtg cttcctctgc tactcatga cttcatctt cattgcaag ccatccagg cagtgtgtac cttacggcgt cttggtttg gaactgctt ctctgtctg tactcagccc tgcaccaca gaccaaccg attgcacga tcttgggtg ggcggggag ggtgcacgc gccacgctt catcagtcct gctcacagg tggccatctg cctggcactt atctgggcc agctgctcat cgtggtgcc tggctggtg tggaggcacc gggcacagg aaggagacag ccccggaag cgggaggtg gtgacactg gctgaacca ccgcatgca agtatgttg gctcgtggc ctacaatgt cctcctatg cgtctgcac gctttatgcc ttcaatactc gcaagtccc cgaaccttc aacaggcca agttcattg cttcaccatg tacaccacct gcatactctg gctggcattg ttgccatct tctatgtcac ctccagtgac taccgggtac agaccaccac catgtgcgtg tcagtgcagc tcagcgctc cgtgtgctt ggtgctctt ttggcccaa gctgcacatc atctcttcc agccgcagaa gaagtgtt agccacggg caccacacg cgtcttggc agtgcgtg ccagggccag ctccagcctt ggccaagggt ctggctccc gttgtccc actgtttgca atggcgtga ggtgtgtgac tgcacaagt catcgcttg a MGSLLALLAL LPLWGAEG PAKVLTLEG DIVLGLFPV HQKGPAEDC GPVNEHGIQ P RLEAMLFALD RINRDPHLLP GVRLGAHILD SCSDTHALE QALDFVRASL SRGADSRHI CPDGSYATHG DAPTAITGVI GGSYSVDSIQ VANLLRLFOI POISYASTSA KLSDKSRYDY FARTVPPDF QAKAMAEILR FENWTVSTE ASEGDTGETG IEAFLEEARA RNICVATSEK VGRAMSRAAF EGVRALLOK PSARVAFLT RSEDARELLA ASQRLNASFT WVASDGGAL ESWAGSEGA AEGAITIELA SYPISDFASY FQSLDPWNS RNPWFREFWE QRFCSEFRQR DCAHSLRAV PFEQESKIMF VNNAVYAMAH ALHNMHRALC PNTTRLCDAM RPVNGRRLYK DFVLNVKFDA PFRPADTHNE VREDREGDGI GRNIFTYLR AGSGRYRYOK VGYWAEGLTL DTSLEPASP SAGPLAASRC SEPCLONEVK SVQGEVCCW LCIPQPYEY RLDEFTCADC GLGYWFNASL TGCFLPQEY IRWGDWAVG PVTIACLGAL ATLFVLGVFV RHNATPVVKA SGRELVCYLL GGVFLCYCMT FIFIAKPSTA VCTLRRLGLV TAFSVCSYAL LTKNRIARI FGGAREGAQR PRFIPASQV AICLALISQO LLIVAWLWV EAPGTGKETA PERREVVTLR CNHRDASMLG SLAYNVLLIA ICTLYAENTR KCPENFNEAK FIFTMYTTC IWLALLPIF YVTSSDYRVQ TTMCVSVSL SGSVLGCLF APKLHILFQ PQKNVVSRA PLSRFGSAAA RASSSLGQGS GSQFVPTVCN GREVVDSTTS SL cttttgtgtc ggaatgagag gaccaacct gagccagag ccgggtgcag gctcacggc A gccgctgcca ccgcggtcag ctccagttcc tgcaggttc tgcaggtgc aggaattttg tgacaggctc tgttagtctg ttcctcctt atttgaagga caggccaaa atccagttt gaaatgagag aggaactagca tgacacattg gctccacct tgatatctcc cagaggtaca </p>	Homo sapiens
173	3095	Metabotropic NM_000840 Glutamate Receptor 3	<p> aggtccgctt tgaccgcttt ggtgatggtta ttggccgcta caacatcttc acctatctgc gtgcaggcag tggcgcttat cgctaccaga aggtgggcta ctgggcagaa ggcttgactc tggacaccag cctcatccca tggcctccac cgtcagcggg cccctggcc gctctcgt gcaatgagcc ctgcctccag aatgaggtga agagtgtga gccgggcgaa gctcgtgct gctctgcat tccgtgccag ccctatgagt accgattgga cgaattcact tgcgtgatt gtggcctggg .ctactggccc aatgccagcc tgaatggctg cttcgaactg cccagaggt acatccgtg gggcgatgcc tggcgtggg gaactgtac catcgctgc ctgggtgcc tggccacct gtttgtgtg ggtgtctttg tggcgcaaa tggcacacca gtggtcaagg cctcaggtcg ggagctctgc tacatctgc tgggtggtg cttcctctgc tactcatga cttcatctt cattgcaag ccatccagg cagtgtgtac cttacggcgt cttggtttg gaactgctt ctctgtctg tactcagccc tgcaccaca gaccaaccg attgcacga tcttgggtg ggcggggag ggtgcacgc gccacgctt catcagtcct gctcacagg tggccatctg cctggcactt atctgggcc agctgctcat cgtggtgcc tggctggtg tggaggcacc gggcacagg aaggagacag ccccggaag cgggaggtg gtgacactg gctgaacca ccgcatgca agtatgttg gctcgtggc ctacaatgt cctcctatg cgtctgcac gctttatgcc ttcaatactc gcaagtccc cgaaccttc aacaggcca agttcattg cttcaccatg tacaccacct gcatactctg gctggcattg ttgccatct tctatgtcac ctccagtgac taccgggtac agaccaccac catgtgcgtg tcagtgcagc tcagcgctc cgtgtgctt ggtgctctt ttggcccaa gctgcacatc atctcttcc agccgcagaa gaagtgtt agccacggg caccacacg cgtcttggc agtgcgtg ccagggccag ctccagcctt ggccaagggt ctggctccc gttgtccc actgtttgca atggcgtga ggtgtgtgac tgcacaagt catcgcttg a MGSLLALLAL LPLWGAEG PAKVLTLEG DIVLGLFPV HQKGPAEDC GPVNEHGIQ P RLEAMLFALD RINRDPHLLP GVRLGAHILD SCSDTHALE QALDFVRASL SRGADSRHI CPDGSYATHG DAPTAITGVI GGSYSVDSIQ VANLLRLFOI POISYASTSA KLSDKSRYDY FARTVPPDF QAKAMAEILR FENWTVSTE ASEGDTGETG IEAFLEEARA RNICVATSEK VGRAMSRAAF EGVRALLOK PSARVAFLT RSEDARELLA ASQRLNASFT WVASDGGAL ESWAGSEGA AEGAITIELA SYPISDFASY FQSLDPWNS RNPWFREFWE QRFCSEFRQR DCAHSLRAV PFEQESKIMF VNNAVYAMAH ALHNMHRALC PNTTRLCDAM RPVNGRRLYK DFVLNVKFDA PFRPADTHNE VREDREGDGI GRNIFTYLR AGSGRYRYOK VGYWAEGLTL DTSLEPASP SAGPLAASRC SEPCLONEVK SVQGEVCCW LCIPQPYEY RLDEFTCADC GLGYWFNASL TGCFLPQEY IRWGDWAVG PVTIACLGAL ATLFVLGVFV RHNATPVVKA SGRELVCYLL GGVFLCYCMT FIFIAKPSTA VCTLRRLGLV TAFSVCSYAL LTKNRIARI FGGAREGAQR PRFIPASQV AICLALISQO LLIVAWLWV EAPGTGKETA PERREVVTLR CNHRDASMLG SLAYNVLLIA ICTLYAENTR KCPENFNEAK FIFTMYTTC IWLALLPIF YVTSSDYRVQ TTMCVSVSL SGSVLGCLF APKLHILFQ PQKNVVSRA PLSRFGSAAA RASSSLGQGS GSQFVPTVCN GREVVDSTTS SL cttttgtgtc ggaatgagag gaccaacct gagccagag ccgggtgcag gctcacggc A gccgctgcca ccgcggtcag ctccagttcc tgcaggttc tgcaggtgc aggaattttg tgacaggctc tgttagtctg ttcctcctt atttgaagga caggccaaa atccagttt gaaatgagag aggaactagca tgacacattg gctccacct tgatatctcc cagaggtaca </p>	Homo sapiens

gaaacaggat tcatgaagat gtgacaaga ctgcaagttc ttaccttagc ttgtttttca
aaggatttt tacttctttt aggggacctt aactttctaa ggagagagat taaaatagaa
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gcctccgagg gtgattacgg ggagacaggg atcgaggcct tcgagcagga agcccgctg
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tacgaatacc tggctgatga gttacactgt atgattgtg ggtctggaca gtggccact
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gccattggcc cagtcacctt tgcctgtctg ggttttatgt gtacatgcat ggttgaact
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aaaacggga agtgcacaga aaatttcaac gaagtaagt tcatagttt taccatgtac
accacgtgca tcatctggtt ggccttctc cctattttt atgtgacatc aagtgaactac
agagtgcaga cgacaacctc tgcactctct gtgcacttga gtggctttgt ggtcttggc

3095 Homo sapiens

174 3095 Metabotropic NP_000831.1 MLTRLQVLT ALFSKGFLLS LGDHNEFLRE IKIEGLVLG GLFPINEKGT GTEECGRINE P

Glutamate
Receptor 3

tggttggttg caccacaagt tcaatcatc ctgtttcaac ccagaagaa tggtgtcaca
cacagactgc acctcaacag gttcagtgct agtggaaactg ggaccacata ctctcagtc
tctgcaagca cgtatgtgcc aacgtgtgct aatggcggtg aagctctcga ctccaccacc
tcactctgt gatttgtaat tgcagttcag tctctgtgtg tttagactgt tagacaaaag
tgctcaagt cagctccaga atattgaaac agagcaaaag aacaaacctg gtacctttt
ttagaacacg tacgataaat tattttgag gactgtatat agtgaatgct tagaactttc
taggtgagt ctagtcccc tattattaac aattccccca gaacatggaa ataaccattg
tttacagagc tgagcatggg tgacagggct tgacatggct agtctactaa aaaaacaaaa
aaaaaacaa aaaaaaaa acaaaagaaa aataaaaaa tacgggtggca atattatga
acctttttc ctatgaagt tttgtaggt cctgttgta actaattag gatgagttc
tatgttgtat attaaagtta cattatggt aacagattga tttctcagc acaaaataaa
aagcatctgt attaatgtaa agatactgag aataaaacct tcaagtttt
DRGIQRLAM LFAIDEINKD DYLLFGVKG VHLDTCSR DYALEQSLF VRASLTKVDE
AEYMCDDGSY ATQENIPLLI AGVIGGSYSS VSIQVANLLR LFIQPIQSYA STSAKLSDKS
RYDYFARTVP PDFYQAKAMA EILRFENWTY VSTVASEGDY GETGIEAFEQ EARLRNICIA
TAEKVGRSNI RKSYSVSIRE LLOKPNARVV VLFMRSDDSR ELIAAASRAN ASFTWVASDG
WGAQESIIGK SEHVAYGALT LELASQPVRO FDRYFQSLNP YNNHRNPWR DFWEQKFOCS
LQNKRNHRV CDKHLAIDSS NYEQESKIMF VNAVYAMAH ALHKQRTLC PNTTKLCDAM
KILDGKKLYK DYLLKINFETA PENPNKDADS IVKEDTFDGD MGRYNVFNFO NVGGKYSYLK
VGHWAETLSL DVNSIHWSRN SVPTSQCSDP CAPNEMKNMQ PGDVCCWICI PCPEYETLAD
EFTCMDCGSG QWETADLTGC YDLPEDYIRW EDWAIGPVT IACLFMCTC MVTVFIRHN
NTPLVKASGR ELCYILLFGV GLSYCMTEFF IAKPSPVICA LRRGLGSSF AICYSALLTK
TNCIARIFDG VRNGAQRPKF ISPSQVFC LGLILVQIM VSWLILFAP GTRRYTLAEK
RETIVILKNV KDSSMLISLT YDVLVILCT VYAFTRKCP ENFNEAKFTG FTMVTTCTIW
LAFLEPIFYVT SSDYRVQTT MCISVSLSGF VLGCLFAPK VHILLFQPK NVVTHRLHLN
RFSVSGTGTT YSQSSASTYV PTVCNGREVL DSTTSSL
ccgagtgaca agagagtggtg agaggttagc agcatggct acgcggttgg ctgccctcag A
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agagaggtt gggctgggtg tgggcccggc tgccccttg cctgctctc agctttacg
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cagacctgag tgacaacagc cgtactgact tcttctccg cgtgggtgccc tgggacaagt
accaggccca ggccatgggt gacatgctc gtgccctcaa gtggaactat gtgtccacag

3096 Homo sapiens

175 3096 Metabotropic NM_000841 GLTAMATE

Glutamate
Receptor 4

tggcctcgga gggcagctat ggtgagagcg gtgtggagcg cttcatccag aagtcocgtg
aggcggggg cgtgtgcacg gccagtcggt tgaagatacc acggagccc aaggcagcg
agttcgacaa gatcatccg cgcctctgtg agacttcgaa cgcagggca gtcatcatct
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gccatttctt ctggatgggc tctgacagct ggggtctcaa gattgcacct gtgtgcacc
tggaggaggt ggctgaggt gctgtacga tcttcccaa gaggatgtcc gtacagggct
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agttctgga ggacaacttc cactgcaagc tgagcgcga cgcctcaag aaggcagcc
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ggaagtgca gtttgtgac gatgcgtgt acgcatggg ccacgcgtg cagccatgc
accgtgacct gtgtccggc cgcgtggggc tctgcccgg catggacct gtatgggca
cccagctgct taagtacatc cgaacgtca acttctcagg catcgagg aacctgtga
ccttcaatga gaatgagat ggcctgggc gttatgacat ctaccaatc cagtcgcga
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agcggatgca ctggccgggg agcgggcagc agctgcccg ctccatctgc agcctgccct
gccaacggg tgagcggaag aagacagtga agggcatgcc ttgtgtctg cactgcgagc
cttgacacag gtaccaglac cagggtggacc gttacacctg taagcgtgt cctatgaca
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aactgagcta cgtgtgtctg gaggcatct tctgtgtcta tgcaccacc tctctaatga
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tggtaacgtg caccgtgtat gccatcaaga cagcggcgt gcccgagacc ttcaatgagg
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tcttcttgg cactcgcag tggccgaca agctgtacat ccagcagc agctgacgg
tctcgtgtg tctgagcgc tgggtgtccc tgggaatgct ctacatgcc aagttatca
tctctctt ccaaccggag cagaactgc ccaagcga ggcagcctc aaagcgtcg
ttacggcggc caccatgcc acaagtta cgaagaagg caacttcgg ccaacggag
aggccaagtc tgagctctg gagaacctg agggcccag cgtggccacc aaacagactt
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tcaactgtg cagcctggc aaaccgggtg agcaacagga ggacgaggg ccgggggggt
gccaggtac cacaagaacc tgcgtcttgg accttccc ctccggccc caaacacag
gggtcaggt cgtgtgggc ccagtgtag atctctccc cctctcgtct ctgtctgtgc
tgttggcgac cctctgtct gtctccagcc ctgtcttctt gttctttat ctctttgttt

176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	<p> cacccttcc cttctgtggc tcccggctg cttgtactc ttgccccttc ttgtctcctc ttctggctct tgcctccgc tctctctctc atcctctctt tctcagctc ctctgtcttc cttgggtccc acaagtgtca cttttctgcc gttttcttc cttctctctc ctgttccatt ctgtccagc cattgtctcc cttctctgc caccctccc cagttcacca aacottacat gttgcaaaag agaaaaag aaaaaaac aaaaacaaa aaagcaaaa cgaacaaaa tctcagagt gtgccaagt gtgcgtctc cctggtggcc tctgtgtgtg tccctgtggc ccgcagcctg ccgcctgcc ccgccatct gccgtgtgtc ttgccctcct gcccgcccg tctgccgtct gtctgtcccg cctgcccgcc tgcctcctc gccgaccaca cggagttcag tgcctgggtg ttgtgtgat gttattgacg acaatgtga ggcgatgatt gttttatc caagaacatt tctaataaaa ataaacacat gttttgcaa aaaa 176 3096 Metabotropic NP_000832.1 SLYGPNPSS LGKPKGHPHM NSRIDGDT LGGLFPVHGR P GSEKPCGEL KKEGIHRL AMLFALDRIN NDPDLLPNT LGARILDTC RDTHALEQSL TFVQALIEKD GTEVRGSGG PPIITPERV VGVIGASGSS VSIMVANILR LFKIPQISYA STAPDLSNS RYDFSRVVP SDTYQAQAMV DIVRALKNWY VSTVASEGSY GESGVEAFIQ KSREDGGVCI AQSVPKIPREP KAGEFDKIIR RLLETSNARA VIIFANEDDI RVLEAARRA NQTHFFWVG SDSWGSKIAP VHLLEVAEG AVTILPKRMS VRGFDRYFSS RTLDNNRRNI WFABFWEDNF HCKLSRHALK KGSHVKKCTN RERIGQDSAY EQEKGQFVFI DAVVAMGHAL HAMRDLCPG RVGLCPMDP VDGTQLIKYI RVNVEGSIAG PVTENENGDI AGRVDIYQY OLNRDSAEYK VIGSWTDHLH LRIERHWPBG SQQLPRSTC SLPQPPGERK KTVKGMPCCW HCEPCTGYQY QVDRYCTKC PYDMRPTENR TGORPIPIK LEWSPWAVL PLFLAVVVGIA ATLEFWITFV RYNDPIVKA SGRELSVLL AGIFLCYATT FLMAEPDLG TCSLRIFLG LGMSISYAAL LTKTNRIYRI FEQGRSVSA PRISPASQL AITFSLISLQ LLGICWVWV DPSSHWDFO DQRTLDPEFA RGVLCDISD LSLICLLGS MLLMVTCTVY AIKTRGVPET FNEAKPIGFT MYTTCIVWLA FPIFFGTSQ SADKLYIQTT TLFVSLSA SVSLGMLYMP KVYIILFHE QNVPRKRSL KAVVTAATMS NKFTQKGNFR PNGEAKSELC ENLEAPALAT KQTVTYTNH AI 177 3097 Metabotropic NM_000842 Glutamate Receptor 5 </p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p> acaaaatggt ccttagaaa atacatctga attgctggct aattcttga ttgagactc A aacgtaggac atcgcttgtt cgtagctatc agaacctcc tgaatttcc ccaccatgct atctttattg gcttgaaact ctttctctaaa atggtccttc ttgtgatcct gtcagtctta cttttgaaag aagatgtccg tgggagtgc cagtccagtg agaggaggtt ggtggtcac atgcgggtg acatcattat tggagctctc tttctgttc atccacagcc tactgtggac aaagtctatg agaggagtg tggggcggtc cgtgaacagt atggcattca gagagtggag gcaatgctgc atacctgga aggatcaat tcagaccca cactcttgc caacatcaca ctgggctgtg agataagga ctcctgttg cattcgctg tggccctaga gcagagcatt gagttcataa gagattccct cattcttca gaagaggaag agggcttgg acgtgtgtg gatggctctc cctctcctt ccgctccaag aagccatag taggggtcat tgggctggc tccagtctg tagccattca ggtccagaat ttgctccagc ttitcaaat acctcagatt gcttactcag caaccagcat ggtatctgagt gacaagactc tgttcaataa ttctcagag gttggtcctt cagatgctca gaggcaagg gccatggtg acatagtga gaggtacaac tggacctatg tatcagcctg gcacacagaa ggaactatg gagaagtgg gatggaagcc ttcaaaagata tgtcagcgaa ggaagggtt tgcctcggcc actcttaca aatctacagt </p>	Homo sapiens

aatgcagggg agcagagcct tgataagctg ctgaagaagc tcacaagtca cttgcccagg
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agtgtggta cccgcttcc ggccaacatc agcagatcga actccatgat gctgtccacc
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178	3097	Metabotropic NP_000833.1	MLLLLSVL	ILKEDVRGSA	QSSERRVVAH	MPGDIILGAL	FSVHQPTVD	KVHERKGVAV	P	Homo sapiens
		Glutamate	REQYGIQ	RVEMLHIERIN	SDPTLLPNIT	LGCEIRDSW	HSVALEQSI	EFIRDSLIS		
		Receptor 5	EEEEGLVRCV	DGSSSSFRSK	KPIVGVICPG	SSSVAIQVN	LLQLENIPQI	AYSATSMDLIS		
			DKTLFKYFMR	WVPSDAQQAR	AMVDIVKRYN	WTVVSAVHTE	GNYESGMEA	EKMSAKEGI		
			CLAHSYKIYS	NAGEQSFDKL	LKKLTSLPK	ARWVACFCEG	MTVRGLLMAM	RRLGLAGEFL		
			LLGSDGWADR	YDVTGYQRE	AVGGITIKLQ	SPDVKWFDDY	YKLKRPETNH	RNPWFQEFWQ		
			HRFQCRLEGF	POENSKYNKT	CNSSILTKTH	HVQDSKMGFV	INAIYSMAYG	LHNMQMSLCP		
			GYAGLCDAMK	PIDGRKILES	LMKTNFTGVS	GDITLEDENG	DSPGRYEIMN	EKEMGKDYFD		
			YINVGSDWNG	ELKMDDEW	SKKSNIIRSV	CSEPCKEGQI	KVIRKGEVSC	CWTCPCCKEN		
			EYVFEYTC	ACQLGSWPTD	DITGCDLIPV	QYLWGDPEP	IAAVVFACLG	LLATLEFVTV		
			FIIYRDTFV	KSSSRELCTY	ILAGICIGYL	CTFCLIAKPK	QIYCYLQIRIG	IGLSPAMSYS		
			ALVTKTNR	RIAGSKKKI	CTKPKPREMSA	CAQLVIAFIL	ICIQIGIIVA	LFIMEPPDIM		
			HDYPSIREVY	LICNTTNLGV	VTPLGYNGLL	ILSCTFYAFK	TRNVPANFNE	AKYIAFTWYT		
			TCIIWLAFVP	IYFGSNYKII	TMCFSVLSA	TVALGCMFVP	KVYIILAKPE	RNVRSFTTS		
			TIVRMHVGDG	KSSSRAARSS	SLVNLWKRKG	SSGETLSSNG	KSVTWAQNEK	SSRGQHLWQR		
			LSIHINKKEN	PNQTAVIKPF	PKSTESRGIG	AGAGAGGSAG	GVGATGGAGC	AGAGPGGPES		
			PDAGPKALYD	VAEAEHFPA	PAPRPSPI	STLSHRAGA	SRTDDVPSL	HSEPVARS		
			SQGSLEQIS	SVTRFTANI	SELSNMLST	AAPSPGVGAP	LCSSYLIPKE	IQLPTMTTF		
			AEIQPLPAIE	VTGGAQPAAG	AQAAGDAARE	SPAAGPEAA	AKPDLEEIVA	ITPPSPFRDS		
			VDSGSTTPNS	PVSESALCIP	SPKYDTLII	RDYQSSSSS				

179	3098	Metabotropic Glutamate Receptor 6	NM_000843		Homo sapiens	A
						cgagagcccg ggcaggcccg ctgagtaac tccccagagc caaagtggaa ggcgcgcccc
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						tggcgggcc ccgagagcc cgggagccg tgcctgggc gctcgtgcg ctggcggtgc
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						tcctgtgggt cggctcagc agctggggg ccaagacct accatcttg agcctggagg
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						cgtctgccc tgggcacaca ggcctgtgc cggcgatgga accacccgat gggcggtgc
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gttcttagta gaggcatttc tactactgatt gcactgagga tatctccca gtgtgaagtt
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180	3098	Metabotropic NP_000834.1 Glutamate Receptor 6	<p> tgggcctctc tggcaggaaac tctgatgcac cgcgaggccc atgtactcct gtgctttct cacattcggt ctactgcag ggtatctcca cagcatgcac cattctgggt acagggggac atctctgtt acgagagatg ttgtctatt tagtaccttc apcaggtttc tctcttcca gaattttctg atgtacacaa ataactgact tccacaagag ggtttttcca cactcgggtg gtgcatacag ttctgcctg tgatcatttc ttatgtttat tattttatt ttctgagata gggtcttgct caatttctta ggctggagtg cagtggcaag atcatagctc actgaagttt cgacctgggc tcaadgaac ctcctgcttc agcctctga gtagctggtg cgcacgacca taccagacta atgttttatt tttttagag acgaggtctc actatgttc ccaggtggt ctcgaacttc tgagctcag cgtacctctt gctccacct cccaaagtgt tcgattaca aacgtgagcc atgcaccta gctctttga tcatctctgt ggtgttcagt gggggttgac agctccctaa agattttctt gttttttg atgcattggt ttgaattctt tgagttccaa tttatttga cccctgaata agttttgtg ggttttctt tatgtgtgga attatatagg cattctcca gtgtggttc tcttatgtc agtgagagct gacctgcac gaagtttctc ccattgttg ccttgaatt atctgtatga attatatgtt ccagtgaac tggagttctg ggttgaggcc ttattccatg ttacacaaat taaaattgca gtgttctct ctggatgag agctctaaag cagagtaaga ttacgttctg atgtaagctt taaccacctt ttataaggt ctcactctg gtccactgtg ttgagacttc tacagaagag ctctgtata gtaaccattt tcttagctg tctcactgtg gtgaattctc tgacacattt attatagctt tgtccattt cttatccttt ttgctctta gaaatttccc tttaatttat tacattcatt gcttactgta aagagtccag gtaactgact ttaattcaag ttaactctg ttaataaat ttaactttc cc </p>	Homo sapiens
181	3099	Metabotropic NM_000844 Glutamate Receptor 7	<p> KKEQVHRLE AMLYALDRN ADPELLGVR LGARLLDTS RDTVALEQAL SFVQALIRGR GDGDEVGRC PGVPLRPA PPERVAVVG ASASSVIMV ANVRLFAIP QISYASTAPE LSDSTRYDFE SRVPPDSYQ AQAMVDIVRA LGWNYVSTLA SEGNYGESV EAFVQISREA GGVCIQSIK IPREKPGEF SKVIRRLMET PNARGIIFA NEDDIRRVLE AARQANLTGH FLWVGSDSWG AKTSPILSLE DVAVGAILIL PKRASIDGFD QYFTRSLN NRRNIWFAEF WEENFNCKLT SSGTQSDST RKCTGEERIG RSTYEQEGK VQFVIDAVYA IAHALSHMQ ALCPGHTGLC PAMEPTDGRM LLOYIRAVRF NGSAGTPVMF NENGDA PGYR DIFQYQATNG SASSGGYQAV GQWAEIRLD VEALQWSGDP HEVPSLCSL PCGGERKKM VKGVPCWHC EACDGYRFQV DEFTCEACPG DMPTPNHTG CRPTPVRLS WSSPWAAPPL LLAVLGIVAT TTVVATEFVY NNTPIVRASG RELSYVLLTG IFLIYAITFL MVAEPGAANC AARLFLGLG TTLSYSALLT KTNRIYRIFE QGKRSVTPPP FISPTSQIVI TFSLSLQVV GMIAWLGARP PHSVIDYEEQ RTVDPEQARG VLKCDMSDLS LIGCLGYSLL LMVCTVYAI KARGVPETFN EAKPIGFTMY TTCIWLAFV PIFFGTAQSA EKIYIQITLIL TVSLSLASV SLGMLYVPKT YVILFHEQN VQRRKSLKA TSTVAAPKGE EDAEAKH gaattcccaa caccaggtta attttgtat ttttagtaga gattgggttt caccatgttg A gccaggtatg tctccatctc ttgacctcgg gatcctcctg gcttggtctc caaagtgct gggattacag gcatgagtca ccatatccag ccaactgcag tcatcttat ggggaaaca cttggtgaa cccaggtttt ctaagatatac aaacctatg gcaacaccaa gcatttctaat ggaataggca cctggctgac tccaggcatt ctaataatag agacacctg gcaactcag </p>	Homo sapiens

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182	3099	Metabotropic NP_000835.1	Glutamate Receptor 7	<p>tactgtgtat gccatcaaga ctcggggtgt accgagagat tttaacgaag ccaagcccat tggttacct atgtacacga catgtatagt atggcttgcg ttcatcccaa tttttttg cagcgctcaa tcagcggaag agctctacat acaactacc agotttaca tctcatgaa cctaagtga tcagtggcg tcgggatgct atacatgccg aagtgtaca tcatcatatt ccacctgaa ctcaatgtcc agaaacggaa gcaagcttc aagcggtag tcacagcagc cacatgtca tcgaggctgt cacacaacc cagtacaga ccaacggtg aggcaagac cgaactctgt gaaaacgtag acccaaacag cctgtctga aaaaagaat atgtcagtta taataacctg gtatatcaac ctgttccatt ccatggaacc atggaggagg aagacctca gtattttgt caccacact gccataggac tctttgttc taccgcttc ccatcaccg aggagcttcc ccggccggga gccagtggti agaggatcca agcacctaa acagtgcct tatgaaatat ccttacttta tctgggctta atagtcact gacatcagca ctgccaactt ggctgcaatt gtggaccttc cctaccaaag ggagtgtga aactcaagtc ccgcccgggc tctttagaat ggaccactga gagccacagg accgttttgg ggctgacctg tcttattacg tatgtacttc taggttgcaa ggttttgaaa tttctgtac agttgtgag gaccttgca ctttgccatc tgatgtgta cctcggttca ctgttgttt tcgaatgctt tgttttcata gagccctatt ctctcagac gtggaatatt tggaaaaatt taaaacaat taaaatttta aagcaatctt ggcagactaa aacaagtaca tctgtacatg actgtataat tacgattata gtaccactgc acatcatggt tttttttttt aagcaaaaa agatgttaa agacaaaaa ctgtgctgag aaagtatgcc ccacctatct ttggtatatg atagttaca taaaggaag gtattggctg aactgaatag aggtcttgat ttgtggaatg catgcagta atgtatttta cagtcacatg ttattatgtt caatatgtt atttggttc tctttgtta ttttaatta gggtatatga atattttgca ataattttaa taattattaa gctgttgaa ggaagaata tggatttttc atgtctgag gttttgtca tgcaccttt gactgatcag tgtgataagg actttaggaa aaaaagcatg tatgtttttt actgtttgta ataatgactt tcgttaactt tgcgtgctat gtgccaattt agtggaaaaa acaacctt gctgaaaaa tccctcttcc cattctcttt caattctgtg atattgtcca agaattgata aataaggaat tc MVQLRLRV LTLKFPCCV LEVLLCALAA AARGQEMYAP HSIRIEGDVT LGGLFPVHAK P GPSGVPCGDI KRENGIHRLE AMYALDQIN SDPNLLPNVT LGARLIDTCS RDTYALEQSL TFVQALIQND TSDVRCNIGE PPVFKPEKV VGVIGASGSS VSIMVANILR LFQIPQISYA STAPELSDDR HYDFESRVVP PDSFOAQM VDIVKALGWN VSTLASEGSY GEKGVESFTQ ISKEAGGLCI AQSVRIPOER KDRTIDFDRI IKQLIDTPNS RAVTIFANDE DIKQILAAAK RADQVGHFLW VGSDSWGSKI NPLHQHEDIA EGATIQPKR ATVEGFDAYF TSRTLENNRR NWFAEYWEF NFNCKLTISG SKKEDTRKC TQERIGKDS NYEQEKVQF VIDAVYMAH ALHHMNKDLG ADYRGVCPFM EQAGGKKLK YIRNVFNFS AGTPMENKN GDAPGRYDIF QYQTTNTSNP GYRLIGWTD ELQNIEMQ WKGVREIPA SVCTLPCKPG QRKTKQKTP CCWTCPECDG YQYQFDEMT QHCPYDQPN ENRTGQDIP IIKLEWHSPW AVIPVFLAML GIIATIFVMA TFIRYNDTPI VRASGRELSY VLTGIFLCY IITFLMIAP DVAVCFRRV FLGLGNCISY AALLTKTNRI YRIFEQKKS VTAPRLISPT SQIAITSSLI SVQLLGVEFW FGVDPNNII DYDEHKTMNP EQARGVLKCD ITDLQILCSL GYSILMVTC TVYAIKTRGV PENFNEAKPI GFTMYTTCIV WLAFIPFFG TAQSAEKLYI QTTTLTISMN LSASVALGML YMPKVYIIIF HPFLNVQKRK RSPKAVVTAA TMSRLSHKP SDRPNGEAKT ELCENVDPNS</p>	Homo sapiens
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183 3100 Metabotropic NM_000845
Glutamate
Receptor 8

PAKKKVVSY NNLI VI

tgctgtgttg caagaataaa ctttgggtct tgattgcaa tacacctgt ggagaaatg A
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tgtgacattt ctgatctctc actcatttgt tcaattggat acagtatcct cttgaggtc

Homo sapiens

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	<p>actgttactg tttatgcaa taaacagaga ggtgtccag agaatttcaa tgaagccaaa cctattggat ttaccatgta taccacctgc atcatttggg tagctttcat ccccatcttt tttggtacag ccacgtcagc agaaaagatg tacattccaga caacaacact tactgtctcc atgagtttaa gtgtctcagt atctctggcg atgtcttata tgcccaaggt ttatatata atttttcatc cagaaagaa tgttcaaaa cgaagagga gcttcaaggc tgtgttgaca gctgccacca tgcaagcaa actgatccaa aaggaatg agaccaaa tggcaggtg aaaagtgaac tctgtgagag tcttgaacc aacacttctt ctaccaagac aacatatatc agttacagca atcattcaat ctgaacacagg gaaatggcac aatctgaaga gacgtggtat atgatcttaa atgtgaaca tgagaccgca aaatttcaat cctggagatc tccgtagact acaatcaatc aaatcaatag tcagtcttgg aaggaacaaa aattagccat gagccaaaag tatacaataa cggggagtga agaaacccgt ttatatacat aaacccaatg agtgcacagc taagttattg cttattcatg agcagtttaa acaatcaca aaaggaaaac taatgttagc tcgtgaaaaa aatgtctgtg aaataataa tgtctgatg tattcttgta ttttctgtg attgtgagaa ctcccgctcc tctccacat tgtttaact gtataagaca atgagctctg ttcttgtaat ggctgaccag attgaagccc tgggttggc taaaataaa tgcaatgatt gatgcatgca atttttata caataaattt atttctaata ataaaggaat gtttgcaaa aaaaaaaaa aaaaactga g</p>	Homo sapiens
185	3212	Opioid mu-type Receptor	<p>ggaattccgg cttataggcag aggaagaatgt cagatgctca gctcgtctcc ctccgctga A cgctcctctc tgtctcagcc agactgggt tctgtaagaa acagcaggag ctgtggcagc ggcgaagga agcggctgag ggcgttgga cccgaaaagt ctgggtgctc ctggctacct cgacacgagg tgcgcgcgg gcgctcagta ccatggacag cagcgtgccc cccacgaacg ccagcaattg cactgatgcc ttggcgtact caagtgtctc cccagcacc agccccggtt cctgggtcaa cttgtccac ttatagtgga acctgtccga ccatgctggt ccgaacgca ccaacotggg cgggagagac agcctgtgccc ctccgaccgg cagtcctccc atgatcagg ccatcagat catggccctc tactccatcg tgtgctggtt ggggctcttc ggaacttccc</p>	Homo sapiens

186	3212	Opioid mu- type Receptor	NP_000905.1	<p> tgggtcatgta tgtgattgtc agatacacca agatgaagac tgcacacaa atctacattt tcaaccttgc tctggaagat gacttagcca ccagtaccct gcccttccag agtgtgaatt acctaattgg aacatggcca tttagaacca tccattgcaa gatgtgatc tccatagatt actataacat gttcaccagc atattacacc tctgcaccat gactgttgat cgtacattg cagttctgcca cccgtgtcaag gacttagatt tccgtactcc ccgaatgcc aaaattatca atgtctgcaa ctggatcttc tcttcagcca ttgtcttccc tgtaattgtc atggctacaa caaaatacag gcaagggtcc atagattgta cactaacatt cctcatcca accgtgtact gggaaaacct cgtgaagatc tgtgttttca tcttcgctt cattatgcca gtgctaatca ttaccgtgtg ctatggactg atgactcttg gcccaagag tgcgcgatg ctctctggct ccaaagaaa ggacaggaat cttcgaagga tccaccagat ggtgctgggt gtggtggctg tgttcactgt ctgctggact cccattcaca tttactgtat catbaagcc ttggttaca tcccagaac tacgttccag actgtttctt ggcacttctg catgtctcta ggttacaaa acagctgctt caaccagtc ctttatgcat ttctggatga aaactcaaa cgatgcttca gagagtctg tatcccaacc tcttccaaca ttgagcaaca aaactccact cgaattcgtc agaacactag agaccacccc tccacggcca atacagtga tagaactaat catcagctag aaaatctgga agcagaaact gctccgttgc cctaacaggg tctcatgcca tcccgacctt caccagctt agaagccacc atgtatgtg agcaggttg cttcaagaat gtgtaggagg ctctaattct ctaggaaagt gctactttt aggtcatcca acccttttcc tctctggcca ctctgctctg cacatttagg ggaacgcca aagtaagtgg agcatttggg aggaaggaa tataccacac cgaggagtc agtttgtga agacacccag tggaacaaa accctcgtg gtatgtgaat tgaagtcatc ataaaagggt acccttctgt ctgtaagatt ttatttcaa gcaaatattt atgacctcaa caaagaagaa ccactttttg ttaagttcac cgtagtaaca cataaagtaa atgctacotc tgatcaaac accctgaatg gaagtcoga gtctttttag tgtttttgca agggaatgaa tccattattc ttttttagac ttttaacttc aacttaaat tagcatctgg ctaaggcatc attttcactt ccatctctg gttttgtatt gtttaaaaa aataacatct ctttcatcta gctccataat tgaagggaag gagattagca tgaaggtaaa tctgaacacac agtcatgtgt canctgtaga aaggttgatt ctcatgcact ncaaatactt ccaaagagtc atcatggggg atttttcatt cttaggcctt cagtgtgtt tctctggaa tc </p>	Homo sapiens
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	<p> ptgspsmita itimalysiv cvvlgfngfl vmvivrtyk mktatniyif nlaladalat stlpfqswny lmgtwpfcti lckivisidy xnmftsiftl ctmvdraya vchpvrkaldf rtprnaklin vcnwilsai glpvmfmatt kyrgsidrt ltfshptwyw enlvkicvfi fafimpvlii tvcyglmilr lksvrmlsgs kerdnrlrri trmlvrvav fivcwtphi xviiikalvti pettftqfsvw hfciatgyn sclnplvlyaf ldenekrcef efciptssni eqonstriro ntrdhpstan tvdrtnhqle nleatapl atgaacactt cagccccacc tggctgcagc ccaacatca ccgtctctgc accagaaag A ggtccctggc aagtggcctt catgggac accagggcc tccgtctgct agccagctg acaggcaacc tggctggact catctcttc aaggtcaaca cggagctcaa gacagctaat aactacttcc tggtagcct ggcctgtgct gacctcatca tgggtacctt ctccatgaac ctctatacca cgtacctgct catggggccac tgggtctctg gacgctggtc ttgtgacctc </p>	Homo sapiens

183/448

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p> tggctggccc tggactatgt ggcagcaat gcctcgtca tgaatctgct gctcatcagc tttgaccgct acttctccgt gactcggccc ctgagctacc gtgccaagcg cacaccocgc cgggcaagctc tgatgacgg cctggcctgg ctggttctct ttgtctcttg ggcaccaagcc atcctctctt ggcagtacct ggtaggggag cggacatgc tagctgggca gtgctacatc cagttctctt ccagcccat cctacacctt ggcacagcca tggctgacct ctacctcct gtcacagtca tgtgacgct ctactggcg atctaccggg agacagaga cggagcacgg gagctggcag cccttcaggg ctcgagagc ccaggcaaa ggggtggcag caggcagcagc tcagagaggt ctacagccag gctgagggc tcaccagaga ctctccagg cgcctgctgt cgctgctgcc gggccccccag gctgctgcag gcctacagct ggaaggaaga agaggaagag gacgaaggct ccattggagtc cctcacatcc ttagaggag aggagcctgg ctccgaagtg gtgatcaaga tgcctaatgtt ggaacccag gacagagccc ccaccaagca gccccacggg agctcccca atacagtcaa gagccgact aagaaagggc gtgatcgagc tggcaagggc cagaagcccc gtggaagga gcagctggcc aagcggaaga ccttctcgt ggtcaaggag aagaaggcgg ctcggacctt gagtgccatc ctctggcct tcatctcacc ctggacacgg tacaacatca tggctgctgt gtccaccttc tgcgaagact gtgttccga gacctgtgg gagctgggct actggctgtg ctacgtcaac agcaccatca acccatgtg ctacgcactc tgcaacaag ccttcggga cactttcgc ctgctgtgc ttgcccgtg ggacaagaga cgctggcgca agatcccca gcgcctggc tccgtgcacc gactccctc cgcaccaatgc tga </p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p> atgaataact caacaaact cctcaaat agcctggctc ttacaagtc ttataagaca A tttgaagtgg tgttattgt cctggtggct ggtacctca gtttggtag cattatcggg aacatccctag tcatggttc cattaaagt aaccgccacc tccagaccgt caacaattac ttttattca gcttggcctg tgcagacctt atcataggtg ttcttccat gaacttgtac acctctaca ctgtgattgg ttactggcct ttgggacctg tgggtgtgta ccttggcta gacctggact atgtggtcag caatgcctca gttatgaatc tgcctcatc cagctttgac aggtacttct gtgtacaaa acctctgacc taccagatca aggggaccac aaaaatggca ggtatgatga ttgcagctgc ctgggtcctc tctttcacc cctgggctcc agccattctc ttctggcagt tcatgttagg ggtgagaact gtggaggatg gggagtgtca cattcagttt ttttccaatg ctgtgtcac ctttggtagc gctattgag cctctattt gccagtgtac atcatgactg tgctatattg gcacatatcc cgagccagca agagcaggat aaagaaggac aagaaggagc ctgttgccaa ccaagacccc gtttctcaa gtcctgttaca aggaaggata gtgaagccaa acaataacaa catgccagc agtgacgatg gctgggagca caaaaaatc cagaatggca agccccccag ggtctctgtg actgaaaaact gtgttcaggg agaggagaag </p>	Homo sapiens

190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>gagagctcca atgactccac ctaagtcagt gctgtgcct ctaatatgag agatgatgaa ataaaccagg atgaaaaacac agtttccact tccctgggcc attccaaga tgagaactct aagcaaacat gcatcagaat tggcaccaag acccaaaa gtgactcatg taccccaact aataccaccg tggaggtagt ggggtcttca ggtcagaagt gagatgaaaa gagaaatatt gtagcccgca agattgtgaa gactactaag cagctcgcaa aaaaagacc tctccttcc cgggaaaaga aatcaccag gacatcttg gctattctgt tggctttcat catcacttgg gccccataca atgicattgt gctcattaac accttttgt cactttgcat cccaacact gtgtggacaa ttggttactg gctttgttac atcaacagca ctatcaacc tgcctgctat gcactttgca atgccacett caagaagacc tttaaacacc ttctcatgtg tcattataag aacataggcg ctacaagta a</p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	IGL143	<p>FLFSLACADL IIGVFESMLY TLYTVIGYWP LGPVCDLWL ALDYVSNAS VMNLLIISFD RYFCVTKPLT YPVKRTTKMA GMTAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF FSNAAVTEGT AIAAFYLPVI IMTVLYWHIS RASKRIKDD KKEPVANQDP VPSLVOGRI VKPNNNMPS SDDGLEHNKI QNGKAPRDPV TENCVOGEEK ESSNDSTSVS AVASNMRRDE ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTTVEVVGSS GQNGDEKQNI VARKIVMTK QPAKKKPPPS REKKVTRTIL AILLAFITW APYNVMVLIN TFCAPCIPNT VMTIGYWCY INSTINPACY ALCNATFKKT FKLLMCHYK NIGATR</p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>atgggccaact tcacacctgt caatggcagc tcgggcaatc agtccgtgcg cctgggtcacg A tcatcatccc acaatcgcta tgagacgggtg gaaatggtct tcaatgccac agtgacaggc tccctgagcc tggtagactgt cgtgggcaac atcctggtaga tgcgtgccat caaggtcaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgctt tctccatgaa cctctacacc gtgtacatca tcaagggtgcta ctggccccctg ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagagaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgcy tcaccaagcc tctcactac ctgccccgc gcaccaccaa gatggcagc ctcatgattg ctgctgccttg ggtactgtcc ttcgtgtctt gggcgccctgc catctgttc tggcagtttg tggtaggtgaa gcggacgggtg ccgacaaac actgcttcat ccagttcctg tccacccag cagtgaacct tggacagcc attgctgctt tctacctgct tgtgttcate atgacgggtgc tgtacatca catctccctg gccagtgcga gccagtgcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag acgtggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgccccgga ggcgcgcccg gaggactgcy caatggcaag ctggagggag cccccccgac agcgtgcca</p>	Homo sapiens

193	3226	Muscarinic acetylcholin e Receptor M4	NP_000732.1	MANFTPVNGS SGNOSVRLVT SSSHRYETV EMVFIATVTG SLSLTVTVGN ILVMSIKVN P	Homo sapiens	<p>cgccaccgc gccccgtggc tgataaggac acttccaatg agtcacagctc aggcagtgcc accagaaca ccaaggaacg ccagaccaca gagctgtcca ccacagggc caccactcc gccatgccg cccctccctc gagccgagg gccctcaacc cagctccacg atgggtccaa atccagattg tgaggaagca gacaggcaat gagtgtgtga gacccattga gattgtgctt gccacgcgg ctggcatcg cctggggc aacgtggccc gaaattcgc cagcatcgct cgaaaccagg tggccaagaa gggcagatg gggcccggg agcgaaagt gacagaaag atctttgcca ttctgctagc ctteatctc accctggacg cctacaacgt catggctctg gtgaacacct ttggccagag ctgcatccct gacacgtgtt ggtccattgg ctactggctc tgctaogtea agacacat caaccctgc tgctatgctc tggcaacgc cacttttaa agaccttcc ggcacctgt cgtgtgccg tatcggaaca tcggcactgc caggtag MANFTPVNGS SGNOSVRLVT SSSHRYETV EMVFIATVTG SLSLTVTVGN ILVMSIKVN P</p>
194	3227	Muscarinic Acetylcholin e Receptor M5	NM_012125	<p>ROLQTVNRYF LFSIACADLI IGAFSNLYT VYIKGYWPL GAVVCDLWIA LDYVVSNAV MNLIIISFDR YFCVTKPLTY PARRTXMAG LMIAAWWLS FVIMAPALIF WQFVVGKRTV PDNHCFIQFL SNAVTFGTA IAAFYLPWI MTVLYIHISL ASRSRVHXR PEGPKEKKAK TLAFLKSPLM KQSVKKPRPG GRPGGLRNGK LEEAPPALP PPRPVADKD TSNESSGSA TONTKERPAT ELSTTEATP AMPAPLQPR AINPASRWSK IQVTKQTGN ECVTAIEIVP ATPAGMRPAA NVARKEASIA RNQVRKKROM AARERKVTRT IFAILLAFIL TWTPYNVMVL VNTFCQSCIP DTVWSIGYWL CYVNSINPA CYALCNATEK KTFRHLILCQ YRNIGTAR</p>	Homo sapiens	<p>atggaaggag attcttacc caatgcaacc accgtcaatg gaacccagt aaatcaccag A cctttggac gccacaggt gtgggaagtc atcaccattg cagctgtgac tgcgtgtgta agcctgatca ccatgtggg caatgtcttg gtcattgctt ccttcaagt caacagccag ctcaagacag ttaacaacta ttacctgtc agcttagctt gtcagatct catcattgga atcttctoca tgaacctca caccacctac atctcatgg gacgtgggc tctcgggagt ctggtgttg acccttggct tgcactggac tacgtggcca gaacgcttc tgcattgaac cttctgggtga tcagttttga ccgttacttt tccatcaca gaccttgac atctcgggc aagcgtactc cgaagaggc tggcatcatg attggcttgg cctggctgat ctcttcac ctctggccc cagcaatcct ctgctggcag tacttgggtg ggaagcggac agttccactg gatgagtgc agatccagt ttctcttgag cccaccatca cttttggac tgcattgct gccttctaca tccctgttc tgcattgacc atctctact tgcgaatcta ccggaaaca gagaagcga ccaaggacct ggctgacct cagggttctg actctgtgac caaagctgag aagagaaagc cagctcatag ggctctgttc agatcctgct tgcgtgttc tgcacccac ctggcccagc gggaaggaa ccaggcctcc tggctatct cccgaggag cactccacc actgggaagc catcccaagc cactggcca agcgccaatt ggcccaagc tgacagctc accaactga cagctacc ttctcagag gatgagaca agcccgccac tgacctgtc ctcaagtgg tctacaagag tcagggttaag gaaagccag gggaagaatt cagtgtgaa gagactgagg aaactttgt gaaagctgaa actgaaaaa gtagctatga cacccaaac taccttctgt ctccagcagc tgctcataga cccaagatc agaatgtgt ggcctataag ttccgattgg tggtaaaagc tgacgggaac caggagacca acaatggctg tcacaagtg aaaatcatg cctgcccctt cccagtgcc aaggaaact tagtcaaaagg cctcaatccc aaccacagc atcaatgac caaacgaaag agagtgttcc tagtcaaaagg gaggaagca gccagacac tgagtgcct tctcctggc tcatcatca catggacccc gtataacac</p>

[illegible]

197	3378	Tachykinin Receptor 3	NP_001050.1	aagtagtgt ataattgta caaagacact aataacatgt tagcctccac ccaaatataa atgggcttta aatt PVASPADSOP WANLINOEVQ PSWRALWLSL AYGVAVAVAV LGNLIYIWI LAHKRMRYVT NYFLVNLAFS DASMALNTL VNEIYALHS WYFGANYCRE QNEFFITAVF ASISYMTALA VDRVMALIDE LKPRLSATNT KIVAGSIWL AFLAEPOGL XSKTKMPEG TLCEVQMPBG PKOFTYHII VIIVYCFPL LIMGTYYTIV GILWGEIP GDTCDKXHEQ LKARKVVM MIIVMTFAL CWLPHYIFI LTAIYQOLNR WKYIQOYLA SFWLANSSTM YNPITYCCIN KRFRAGEKRA FRWCPEFIVS SYDELELKT RFHNRQSSM YTVTRMESMT VFDPNDADT TRSSRKKRAT PRDPSFNCS RRNSKSASAT SSFISSPYTS VDEYS	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	gtgctgtgag gcttgccgcg ggaagataa ctgcaaggag cgaagaggag gacatcgat A taaacctaa tctgtggcgt tcagtcctca gggcacccgag cgcgtgaana ctcacagcga ctctgctgga aaggagatca tgcctcttaa gtctcttcc aacctctcg tgaccaacgg cggaatgag agcgttccg tcccgagg gtgggaagg gattcctgc cggcctcgga cgggaccacc accgagttg tgalccgtg tgtatcccg tcccttacc tgcatacat caecgtgggc tgcctggga acatcatgt ggtgaagatc tcatcaca acagcgcaat gaggagcgc cccaacatct tcaatctaa cctggcggc ggggacttg tgcctgtct caactgctc ccggtggag cctgcgcta ctcttcgac gactgagt ttggcaagt gggtgcaaa ctgaccctg tcatcagct cactccgtg ggggttccg tgttcaact cactggcctc agcgccgaca ggtacagagc catcgttaac cccatgaca tgcagagctc agggcattg cgtggagcct gtgtgaagg catggtatc ttggtgtct ccgtgtgt ggcagttccc gaagcgtgt ttccagaagt ggcctgcac agtagctgg ataagcag ctcacagca tgtatcccat accctcaac agatgaatla calccaaga ttcatcagt gtcatcttc tgcctcat tccctatacc acttgctatt attagcatt attattatca tattgcaag acctaatla aaagcgaca caatcttcc ggagaatata atgaacatc caaaaacag atggaacac ggaacgcct ggttaaat gtgtgtct tcttggctg ttcatcttc tgttgttcc caaacacat ccttaccatg tatcgtct tcaactata tgagatgat ccatctctag gccacatgat tgtcactta gtgccggg tctcagtt tggcaattct tgtgtcaacc catctgtct ttactactc agtgaagct tcaaggaga tttcaacagc caactctgt gtggagga gtcctatca gagagagaa ccagctact actcagctct tcaagcgtgc gtatgacatc tctgaagc aatgctaaga acatgtgac caattctgt ttactaaag ggcacagcat gaagcaggaa atggcaatgt gattttggc attcaactca ctacctgag agaactagt aa atkskslsus vttganegs vpegmerdl pasdgttel vircvipsly lliitvglig P NIMLVKIFIT NSAMRSVPI FSNLAAGL LLLITCEPVD ASRYFEDEM EGVGCKILP VIQTSVGS VETLTALSD RYRAIVNPMO MTSGLLRT CVKAGIWW SVLAVPEAV FSEVARISL DNSSEFACIP YPODELHPK IHSVLFLVY FLIPALISI YYYHIAKTLI KSAHNPGEY NEHTKKOMET KRRLAKIVLV FVGCFICWF ENHILMYRS ENYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLSES FRHFNQQLC CGKSYQERG TSYLLSSAV RMTSLKSNAK NWTNSVLIN GHSMQEMAM	Homo sapiens

200	3404	Neuropeptide NM_000910 Y Receptor Type 2	Homo sapiens
tatcctatcc ctatctagc tttaaacctg agcagagct cactacacag gttcctggct	A		
atcgagctcg aatctgact actcaactta taaactgtct gcagacacct gttaggaaaa			
ttgtgatca tggcgccag gatctgaact cgtttacot tcttgtttg agcacaggga			
ccgccagct agaggagac cagcgactg cccccagc ctggcgagg gtgcggaggga			
ttgttctcg gtgcaatct gtggcgctt ttcgggggt ttccggggt ccagctcccc			
atctctgctc ctacacac aaaaagaaac aactctgat tggaaattgt ggaatttct			
cagccctac gagggcggt gattctccag cccggccct cctcccgcca gctgaggtc			
tccttgcct gcctgcctg ctaggagccg cagtcctca gccgcagctg ggtctgtccg			
cccccttt gccctgcct tttccgggg cggatttgg gaagtgcgc tcaagtccag			
gaggtctgc ttgcgcggc cagctctgc ggaactggg gtagagagc aaaggagag			
attcgtgga ggaaggag gtagggtg gcgaacgccc cagagtatca aacttgggg			
tggcacagta ggtgacagca gcagctgag gtgtggctg gggaccgccc agggggcgcc			
cctctgggta ggtctggtc gagcggtt gaaagcccg gagcgctg agagaccctg			
gacactgttc ctgtccctc gccacaaaa ctctcctcc agtcccccc cctgcaggac			
catcgccgc agctctgca cctgttttct tgtgtttaag ggtgggttt gcccccctc			
ccacgtccc atctctgac ctcccacct ccccgcga ccccgaggt gagtgcgtg			
cccaggcggt cttggcctga gaggctgca gaggcccg cagcgccaac cggccagccg			
ctctgactgc tccggctgc cgcgcgcgc gcgcggctg tccctggacc taggaggga			
cggaaacgga cttgccttg ggcaccttc agggccctct ccaggctggc tggctaata			
tggacagac gactgcaca catctgttt ccgctctcc gcaaaacgc gaggctccagg			
tcagtttag actcttgc tggttgcagg ccaagtgag ctgtactgaa aatgggtcca			
ataggtgag aggtgatga gaaccagaca gtggaagaaa tgaaggtgga acaatacggg			
ccaaaaaa ctctagag tgaactgtc cctgacctg agccagagct tatagatagt			
accaagctga ttgaggtaca agttgttctc atattggct actgtccat catcttctt			
gggttaattg gcaactcctt ggtgatccat gtgtgatca aattcaagag catgcgcaca			
gtaaccaact ttttcattgc caatctggct gtggcagatc ttttgggaa cactctgtgt			
ctaccgttca ctcttacct tacctaatg gggagtgga aatgggtcc tgtcctgtgc			
cacctgtgc cctatgcca ggcctggca gtacagtat ccacaatcac cttgacagta			
attgcccctg accggcacag gtgcctgct ggcctagtg cctgtctgc aagtcctctg			
atcagctcc tgattattg cttggcctg atcatcccg actttgagat tbtggcctgt			
gccatctcc gggagtatt gctgattgag atcatcccg actttgagat tbtggcctgt			
actgaaaaat ggcctggcga ggagaagagc atctatggca ctgtctatag tcttcttcc			
ttgttgatct tgtatgttt gcctctggc attatatcat tttcctcac tgcatttgg			
agtaaatga agaacatgt cagtcctgga gctgcaaatg accactacca tcagcgaagg			
caaaaaacca caaaaatgt ggtgtgtgt gtgtgtgtgt ttgcggctcag tgggtgct			
ctccatgct tccagcttc cgttgacatt gacagcagc tccctggact gaaggagtag			
aaactcatct tccagctgt ccacatcac gccatgtct ccaactttgc caatccccct			
ctctatggt ggtgaacag caactacaga aaggttctc tctcggcctt cogctgtgag			
cagcgttgg atgccattca ctctgaggt tccgtgacat tcaaggctaa aaagaacctg			
gaggtcagaa agaacagtg cccaatgac tcttcacag aggtaccaa tgtctaagga			
agctgtgggt tgaataatga tggatgaatt ctgaccagag ctatgaatct ggttgatggc			

201	3404	Neuropeptide NP_000901.1 Y Receptor Type 2	<p>ggctcacaag tgaaaactga ttcccatctt taaagaagaa gtgagatctaa atggaagcat ctgctgttta attcctggaa aactggctgg gcagagcctg tgtgaaaata ctggaattca aagataaggc acaaaaatgg ttactttaac agttgggttg gtagtaggtt gcattatgag taaaagcaga gagaagtact ttgtattatt ttccctggagt gaagaaaact tgaacaagaa attgtatta tcaagcatt gctgagagac ggtgggaaaa taagttagct ttcaaatcac gttaggacct tgattgagga ggtgtgagt tgcgtgctcc ctgcttggtt tatgaaaaca ccactgaaca gaaattctc caggagacca caggctctcc ttcatcgcat ttgattttt ttgttcattc tctagacaaa atccatcagg gaatgctgaa ggaacgatt gccaatata cgaatggctt cgaggagata aactgaaatt tgcataataa ttaatatattt ggcagatgat aggggaactc ctcaacactc agtgggcaaa ttgttcttaa aaccaattgc acgtttggtg aagtttctt caactctgaa tcaaaagctg aaattctcag aattacagga aatgcaaac atcatttaat tictaatttc aagttacatc cgttttatgg agatactatt tagataacaa gaatacaact tgatactttt attgtttatc ctitttgaac atgtatgatt tctgtgttta tttacctttt taaacagata aatatttttt ttcatcttta ggtagcgga atctaacttt aatctaactt tttaggagta tatttcagag aaattccaag cacaccagta tgaccatcct tatttcagaa atgacaatgc atagaggaaa agtaatatgt gcaagcctc cgaaggagat ggtaagtaa agacttaggt taccagtatc agctttcgt ttigtatgt aggtagctct actgctcct cttaaaacca acaaaaggaa gagagactgg ctgcaaacct ttagaaggaa tggtctcgaa taggttctt gggaggatc ccaggaaaat agactgtgt gctctgctga ttgtctcac tatctgttt tgcctctacc cactaatcca cctgggagg ctctggcat tagcggaag ctccaccaca aggagacacag agcagatatt ccataggcat gcgctcctag tggaacgagt ggcttggttc aggatcaaaag agtgaaggat tcggaagtca gctatctgga gagagagaga gattgtgttt tattcgtgtc ccatagcttt cctatcctat cctatccta gcttttaacc tgagccagag ctactacac aggttctctg ctatcgagtc tgaatctgca ctactcaact tataaactgt ctgcagacac ctgttaggga aattgctgat catggggcgc aggatctgaa ctgcttttac ctcttgttt ggaacacagg gacgcccag ctgagaggagc accagcgac tgcgcccag ccttgggcga ggtgctggag gattgttct cggtgcaatc ctgctggcgc ttctcgggg ttctgcggg atccagctcc ccatctctgc tctacacac acaaaagaa acaactctg attggaagt gtggaatttt ctcagccct acgaggcgcg gggattctcc agcccgcc ctctcccg cagctcaggg tctctctgc tgcctgctt tgctagggac cgcagctcct cagcgcagc tgggtctgtc cgcgcgcct ttgcctcgc ctttcccg ggctgattg gtgaagtcgg cctcaagtc aggaggtctg tcttcgcggg gccagctctc</p> <p>ILLGVIGNSL VLVVIRKFS MRVTNFFIA NLAVADLLVN TLCLPFTLY TLMGEWRMGP VLCHLPVYQ GLAVQVSTIT LTVIALDRHR CIVVHLESKI SKRISFLIIG LAMGISALLA SPLAIFREYS LIEIIPDEI VACTEKWPGC EKSIGTVYS LSSLLIYVL PLGIISFST RIWSKLKNHV SPGAANDHYH ORRQTKML VCVVVEAVS WLPLHAFOLA VDIDSQVLDL KEYKLIFTVF HIIAMCTFA NPLLYGMNS NYRKAFLSAF RCEQLDAIH SEVSVTFKAK KNLEVRNNG PNDSTFTEATN V</p>	Homo sapiens
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202	3405	Neuropeptide NM_005972 Y Receptor Type 4	atgaacaccc ctcacccctt ctcacccctt ggccttgctg ctcacaaaat ctcacaaagg tgaacacaga A agcaaacccc tgggcaacccc atacaacttc tctgaacatt gccaggattc cgtggagctg atggctcttca tctgactctt ctcacagcatt gagctctgog tggggctcct gggtaacctc tgctgatgt gtgtgaagt gaggcagaag gagaagacca acgtgaccaa cctgcttatt gccaacctgg ccttctctga cttcctctatg tgctctctct gccagccgct gaccgcccgtc tacaccatca tggactactg gatctttgga gagacctctt gcaagatgtc ggccttcactc cagtgcatgt cggtagcgggt ctcacatcctc tgcctctgct tctgtggcctt ggagagccat cagctcatca tcaacccaac aggcctggaag cccagcatct cacaggccta cctggggatt gtgtcatctt gggctcattgc cgtgtctctc tccctgccc tctgggcaa cagcatcctg gagatgtct tccacaagaa ccaactcaag gctctggagt tcttggcaga taagtggctc tgtaccgagt cctggccact ggtcaccac cgcacatctt acacacactt cctgctctctc ttccagtact gctcccat gggcttcact cgtgtctgtt atgcacgcat ctaccggcgc ctgcagagcc agggggcggct gtttcacaag ggcacctaca gcttgcgagc tgggcacatg aagcaggta atgtgtgct ggtgtgatg gtgtggcct tggcgtgct ctggtgcct ctgeatgtgt tcaacagcct ggaagactgg caccatgagg ccatcccat ctgccacggg aacctcatct tcttagtgt ccaattgctt gcatggcct ccaactgctt caaccatctc atctatggct tctcaaac ccacttcaag aaggagatca aggcctggt gctgacttgc cagcagagcg ccccccctga gactcggag cacttgcccc tgctcacagt acatacgaa gtctccaaag ggtccctgag gctaaagtgc agtctgaatc ccatctaa CLMCVTVRQK EKANVTLLI ANLAFSDFLM CLCQPLTAV YTIMDKWIFG ETLCKMSAFI P QCMSVTVSIL SILVIALERH QLINPTGWK PSISQAYLGI VLIWTACVL SLFFLANSIL ENVEHKNHSALEFLADKV CTESWPLAHH RTIYTFELL FQYCLPLGFI LVCYARIYRR LQQRGRVFHK GTYSLRAGHM KOVNVLVVM VAEFVLWLP LHVNSLEDW HHEAIPICHG NLIFLVCHLL AWASTCVNPF IYGLNTNFK KEIKALVLTQ QQSAPLEESE HLPLSTVHTE VSKGSRLSG RSNPI	Homo sapiens
203	3405	Neuropeptide NP_005963.1 Y Receptor Type 4	gaaaggctat cggtaacaaac tgacctgcca caaagttaga agaaagatt gattcaagaa A agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa taatactgct gccactcgga attctgattt cccagtctgg gatgattata aaagcagtgt agatgactta cagtatttct tgattggct ctatacattt gtaagctctt ttggctttat ggggaatcta cttattttaa tggctctcat gaaaagcgt aatcagaaga ctacggtaaa cttccctata ggcaatctgg cctttctga tatcttggtt gtgctgttt gctcaccttt cacactgacg tctgtcttgc tggatcagtg gatgttggc aaagtcatgt gccattat gcctttctt caatgtgtgt cagttttggt tccaacttta attttaatat caattggcat tgtcagggtat catatgataa aacatcccat atctaataat ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgttctccc ttccagtgtt tcacagtctt gtggaacttc aagaacatt tggctcagca tigtctagca gcaggtattt atgtgttgag tcatggccat ctgattcata cagaattgccc ttactatct ctttatgtct agttcagtat attctgccc tagtttgtct tactgtaagt catacaagt tctgcagaag tataagctgt gattgtoca acaagaaaa cagactgaa gaaatgaga tgatcaactt aactcttcat ccatccaaaa agatggggcc ctctctggca gccataaatg	Homo sapiens
204	3406	Neuropeptide NM_006174 Y Receptor Type 5		Homo sapiens

191/448

205	3406	Neuropeptide NP_006165.1	Y Receptor Type 5	<p>gagttattca ttcatcaaaa aacacagaag aagatatagc aagaagacag catgtgtgtt accgtgtcca gaaagacctt ctcaagagaa cactccaga atactccag aaaatttgg ctctgtaaga agtcagctct ctcatocag taagtcatat ccaagggtcc cactgtgtt tgagataaaa cctgaagaaa attcagatgt tcatgaattg agagtaaac gttctgttac aagataaaa aagagatctc gaagtgttt ctacagactg accatactga tattagtatt tgtgttagt tggatgccac tacacctttt coattgtgta actgatttta atgacaatct tatttcaaat aggcatttca agttgtgta ttgcatttgt catttgttgg gcatgatgtc ctgtgtctt aatccaattc tatatgggtt tcttaataat gggattaaag ctgatttagt gtccctata cactgtcttc atatgtaata attctcactg ttt</p>	Homo sapiens
206	3408	Neurotensin Receptor Type 1		<p>LIILMALMKR NQKTVNFI GNLAFSDIIV VLFCSPFILF SVLLDQWFG KVMCHIMPFL QCVSVLVSTL ILISIAIVRY HMIKHPIISNN LTANHGYYFLI ATVMTLGFAI CSPLEVFHSL VELQETFGSA LLSSRYLCVE SWPDSYRIA FTISLLVQY ILPLVCLTVS HTSVCRSISC GLSNKENRLE ENEMINLTILH PSKSGPQVK LSGSHKWSYS FIKKHRRYS KKTACVLPAP ERPSQENHSR ILPENFGSVR SOLSSSSKFI PGVPTCFEIK PEENSDVHEL RVKRSVTRIK KRSRSVFYRL TILIVFAVS WMLHLFHV TDENDNLISN RHFKLVYIC HLLGNMSCCL NPIYGFLLN GIKADIVSLI HCLHM</p>	Homo sapiens
206	3408	Neurotensin Receptor Type 1		<p>tcaagctgc cccggcagc ccgagccggg ctggggcgtg tctcggggg cctggggaac A cgcgcgtgtt ggagactgga ggcacctgga accgtggca agcgcgagc cgggagacag cccgaggaa caggggttct ggagctagga gccggaagt gggagtcgg aggagagcgg agcccgagc cgggagcccg gggcgcccg tctgggtctg ggccttccc actggacggc ggcgcgcgtg gtcttcgca cgcgcctcc cctgggctcg cgttcacgtg tcccgcctg agagcgccc actctgccc gacttcag cccggagagc gccggacaga gccgggact ccagcccca ccagcgct caacagctcc ggcgggga cccgggac gccggcgcc gacccctcc agcgggcgga gccggactg gaggagggc tctggcccc ggccttcggc aacgtctcg gcaacgcgtc ggagcggtc ctggcggaac ccagcagcga gctggacgtg aacaccgaca tctactcca agtgctgtg accgcgtgt acctgggct cttcgtgtg ggcacggtg gcaacaggt gacggcttc accgtggcc ggaagaagt gctgcagagc ctgcagagca cgtgtcatta ccactgggc agcctgggc tgcggacct gctcaccctg ctgtgtgcca tgccgtgga gctgtacaac ttcacttggg tgcaccacc ctgggccttc ggcgagcgcg gctgcgcgg ctactacttc ctgcggagc cctgcacca cgcacggcc ctcaacgtg ccagcctgag tgtggagcgc taactggcca tctgccacc ctcaaggcc aagaccctca tgtcccgaag cgcaccaag agttcataa ggcacatctg gctgcctcg gcctgtcga cgggtccat gctgttacc atggcgagc agaaccgag cgcgacggc cagcacggc gggcctgtgt gtgaccccc accatccaca ctgccacct caagtcgtc atacaggtea acacttcat gtcttata ttcctcctg tggteatctc ggtcctgaac accatcatc ccaacaagct gaccgtcatg gacggcagg cggcgagca gggccaagt tgcaagggtc gggggcgaga cagcacatc agcatggcca tccagcctgg cagggtccag gcctgcggc acggcgtg cgtcctact gcatgttca tgcctttgt ggtcgtctg ctgcctacc acgtgcggc cctcatgtt tgcatact cggatgagca gtggactccg ttcctctatg actttacca ctactttac atggtgacca acgactctt ctacgtcagc</p>	Homo sapiens

tcacacatca acccattcct gtacaacctc gtctctgcca atttcgcca catcttctctg
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tctctaggc ctgcaccccc tctgtctagc tcggggagtc cagcccagtc ccgcaggct
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ggcagcctg gcccggcct ccaagcagtt gaaaagctg gcgcctcctt ggtctctagg
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gggaaatggg ctctgggctg gctgctgca ccggccatgt cgacccagga cccggacacc
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gcccaggga gtcaaggcta ttcgtgac ttcctgcaa actttgccc caaagcctg
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agcacagagg ggccttctc cccacagag ctcccatgac atagtctgt ctgggggaa
gagctttgct gccagccag gatgtccaga ggtcggtgca gccctatcc ctgctcaga
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ctggatgaga ctgtcctgga ggtaccacc cggacagac gaacaggtgt ctctaggat
ggtgctctga gagagggcag agtgatgcc ccactgcct agaccctcg tagacgtggg
gtctctgggg cggggtctgt ggtgtgact gaagtggct ttcctgtga tgtcttgatg
ctcctatctg tgcaattacc gtaggtaggg aacgtgtcc atgcacaca gacacacca

207	3408	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctagcttgcc gccaggtcat gatgtggccc cggaagctgg ccctgcgtgc catgagtgcg tcggtcatgg agtcgcggag ccctgagccg gccctgggtg aggcacagc cctcacagct caaacgccca ccccactcc caccatctg aggtgtgaa acaaacccc gtgtatctct caataaagt gccgaagg cctcagatgt g	Homo sapiens
208	3452	Opiate Receptor-Like 1 (OPRL1)	NM_000913	YSKVLTVAV LALFVVGTVG NTVTAFTLAR KKSLSQSLST VHYHIGSLAL SDLLTLLAM EVELYNFIW HHPWAFGDAG CRGYFLRDA CTYATALNVA SLSVERYLAI CHPEKAKTLM SRSRTKKFIS AIWLASALLT VPMLETMGEQ NRSADGQHAG GLVCTPTIHT ATVKVVIQWN TMSFIFPMV VISVLNTIIA NKLTVMVRQA AEQGVCTVG GEHSTFSMAI EPGRVOALRH GVRVLRVAVI AFVWCMLPYH VRRLMFCYIS DEWTPFLYD FYHYFVMVTN ALFYVSSTIN PLYNLVSN FRHIFLATLA CICIPVRRRR KRPAFSRKAD SVSSNHTLSS NATRETIY cctgctctgc acctgtctgc gactgccagc cggctgaggc cgggggtctc caggtgggtc A ccagctcca aggaggtgc agaagtaccg tacagagtgg attgcagg cagtggtcatg gagccctct tccccgcgc gtctggggag gttatctacg gcagccacct tcaggccaac ctgtccctcc tgaagcccaa ccacagtctg ctgccccgc atctgtctgt caatgccagc caggcgccct tctgcccct cgggtcaag gtcaccatcg tggggctcta cctggccgtg tgtgtggag ggtcctggg gaactgctt gtcattgacg tcatctcag gcacacaaa atgaagacag ccaccaatat ttacatcttt aacctggccc tggccgacac tcctgtctgt ctgtgcaaga cagtattgc cattgactac tacaactgt tcaccagcac ctccacctc actgcatga gtgtggatcg ctatgtagcc atctgccc ccatccgtgc cctcgaagtc cgcagctcca gcaagccca gctgtcaat gtggccatct ggccctggc ctctgtgtc ggtgtcccg ttgccatcat gggtcgggca caggtcgagg atgaagatcg cgagtgcctg gtggagatcc ctaccctca ggattactgg ggcgggtgt ttgceatctg catctctc ttctcttca tctgcccgt cctgtctatc tctgtctgt acagctcat gatccggcgg ctcctgtggag tccgctgtct ctgggctcc cgagagaagg accggaacct gcggcgcatc actcggctgg tgcgtgtgt agtggctgtg ttctgtgggt gctggagcc tgccaagtc cgtttctga cggccctggg ctacgtcaac agctgctca acccaatct ctacgcttc ctggatgaga acttcaaggc ctgcttccg agttctgt gtgcatctgc cctgcgcgg gacgtgcagg tctctgaccg cgtgcgcagc attgccaagg acgtggccct ggcctgcaag acctctgaga cggtaacgg gcocgcatga ctaggcgtgg acctgacct ggtgcctgtc agcccgcaga gcccatctac gcccaacaca gactcacac aggtcactgc tctctaggc gacacacct gggccctgag catccagagc ctgggatggg cttttccctg tgggcccagg atgtcgggtc ccagaggagg acctagtac atcatgggac aggtcaaaag attaggcda cctccatggc ccagacaga ctaaagctgc cctcctgggt cagggccgag gggacacaa gacctacctg gaagcagctg acctgctgtt ggaagccct tactggagcc cgtgccctc cctcccctg ctctatgta ctctggct ctctgtctgt gcgttggcag aacctgggt gggcaggcac ccggaggagg agcagcagct gtgtcatctc gtgccccca tgtgtgtgt gctgttga tggcagggt cagctgctc cagggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct ttctttggg gtgggacttg	Homo sapiens

Accession	Gene	Protein	Species
209	NP_000904.1	Opiate Receptor-Like 1 (OPRL1)	Homo sapiens
3452	NP_000904.1	Opiate Receptor-Like 1 (OPRL1)	Homo sapiens
210	NM_000273	Ocular Albinism 1 (Nettleship-Falls) (OAL)	Homo sapiens
3513	NM_000273	Ocular Albinism 1 (Nettleship-Falls) (OAL)	Homo sapiens

211	3513	Ocular. Albinism 1 (Nettleship- Falls) (OAI)	NP_000264.1	catggagacc tatgaagggg atgtgctggg ggtccagacc ccatttccct cagactcaac aatcttgtt ctttagaact gtgttctcac cttccaaca ctgcactgcc gaagtgtagc ggcccccaga ccttgctctc atcaccagct agagttctct cccgaaggcc ctttaggata ggagaaaggg ttcatgcaca cagctgtgag aatgaagag cccctccag accactctac agctgctcta gcttagttg ccactaggaa gtttctgag gctgctgta aagtaagtgt aaggtccaca tcttggga agtagttaaa taaaatagt atgactg laqlqlqlp grrpagpasp atppasvri lraaacdlc gclgmwtrst vwlgfpnvd svsdnmhte wpaafcvgsa mwqllylac fwlfcyavd aylvrrsag lstillym awglatllcv egaamlyps vskergldh aiphvtml plllvlanp ilfqkvtav asllkgrqi ytenerrmga vikireffim lvlllcwls iinesllfyl emotdinggs lkpvrtaakt twfimgilnp aqgllslaf ygwtsclsf qsprkeiqwe slttsaaega hpsplmphe pasgkvsqvg gotsdealsm lsegsdasti eihtasescn knegdpalpt hgdl	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt accttggagc ctacaatgag aggtatttca aaatgagtga agcatgactc A tcacagatga aggcctagac gcaggatctt taatggaaaa acacttgggc cacttcaaga cgacaacgc tcactgggca aaacacctc actgaaaaa gacctcatat tatgcaaaaa aaatcttaag aggcctctgc cttcagaagt tacaagatga tcaattcaac ctccacacag cctccagatg aatcctgctc tcagaacctc ctgatacctc agcagatcat tccctgtgtg tactgtatgg tcttcattgc gggaatccta ctcaatggag tgtcaggatg gatattcttt tactgtgcca gctctaaag tttcaatc tctcaatc acattgttat tgcgtacttt gtgatgagcc tgacttttcc tttcaagatc ctgtgagct caggccttgg tccctggcag ctgaacgtgt ttgtgtgag ggtctctgac gtgctctct acgtcaacat gtacgtcagc attgtgttct ttgggtctcat cagctttgac aggtattata aaattgtaaa gctcttgg acttcttca tccagtcagt gagtacagc aaactctgt cagtgatagt atggatgctc atgctctccc ttgctgttcc aaatattatt ctcaaccaac agagtgttag ggaggttaca caaaataaat gtatagaact gaaaagtga ctgggacgga agtggcaca agcatcaaac taccttctcg tggccatctt ctggtattgt ttcttttgt taatcgtttt ctatactgt atcacaaaga aaatctttaa gtcacactt agtcaagtc ggaattccac ttgggtcaaa aagaaatcta gcgcaacat attcagcatc gtgttgtgtg tttttgtctg tttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagctcatta cagctgccag tcaaaagaaa tcttgcggtat tatgaagaa ttcaactctg tactatctgc tgaatgtga tgcttggacc ctattattta ttttttcta tgcagccgt ttagggaat ctatgtgaag aaattgcaca tccattaaa agctcagaat gactagaca tttccagaat caaagagga aatacaacac ttgaagcac agatactttg tgagttccta cctcttcca aagaaagacc acgtgtgcat gttgtcatct tcaattacat aacagaatc aataagatat gtgccctcat cataaaatc atctctagca ctgccatcca attagtcca ataaaattca aataaagtt tccatgcttt ttgttaacat caaagaaac ataccatca gtaattctc taatactgac ctttctattc tctattaata aaaaattat acatacaatt attcaattct attatattaa aataagttaa agtttataac cactagtctg gtcagtaatt gtagaatttt aatagttaaa taaaacacaa cataatcaaa gacaactcac tcaggatct tctttctcta aataccagaa	Homo sapiens

213	3544	UDP-glucose Receptor (K1AA0001)	NP_055694.1	DESCSONLLI KNIVIADEVN YKIVKPLWTS RKHKASNYI VEFVCFVPH PFREILCKKL tgatgaaggt ctggcctcgc cgccgcctcc taccatcca gacctcagct cgacgcgtc gttcgcctgc ggggctctgg gtggaccacg cctccgacac cgacccgctg gccaacgcca cgcaacgagg ctgagcggga ctctctctct ctgcgcgagt ctgggtcaagt tccctggacc cgctgggca atctctctc ccctggggac	1	MINSTSTQPP SLNPFPKILG FIQSVYSYSL FVALFWIVFL IARIPYTKSQ HIPLKAQNDL	TOQIIPVLYC DSGLGPWQLN LSVIVWMLML LLIVFYTAIT TEAHYSCQSK DISRIKRGNT	MVFIAGILIN VFVCRVSAVL LLAVPNILIT KKIKFSLHLS EILRYMKEFT TLESTDTLI	GVSGWIFFYV FYVMYVSIV NQSVREVTFQI SRNSTSVKKK LLLSAANVCL DPIIYFFLCQ	Homo sapiens
214	3582	Oxytocin Receptor	NM_000916	tctagtatgt tgatgaaggg agcaggaaaa gcactgcaaa tagcacttig taatgagcct aatattggca ctgggaaaaa gagaccattt tgagtgcaaa ggattttact tctttctctg acatttttat aaatgtttta	1	acttgaaaga aaaagtacag ttaagaacta tataatattg atacatgcta tggttagaata gcaacttccc cacogtagaa caatataaag caatataaag atacacaata tgccatagaca gctagaagac tgtatctatt atactg	ttaaagacta aaaagtacag ttaagaacta atacatgcta ataatgtttt tttttagta ctgttcaata catatattaa tgattttttt tcacacatca tactgactta atcactatct tctatctatt tcatgtctta	acttgaaaga aaaagtacag ttaagaacta atacatgcta ataatgtttt tttttagta ctgttcaata catatattaa tgattttttt tcacacatca tactgactta atcactatct tctatctatt tcatgtctta	agggcacagt gatttgaaga gattttcatt ttttttctga ttacgtcatt agagaaacta ataaagatga aatgggaaag tttacattaa gaaaacagac aaaactaaat ttctttcaaa actaataaag	Homo sapiens

atcgtgtctg ctaccctgcta cggccttatc agctcaaga tctggcagaa cttgggctc
aagaccgtg cagcgggcg ggcgagggc cagagggcg cggcggtctg cgatggggg
cggctggccc tggcggtgt cagcagctc aagctcgtt ccaagccaa gatccgacg
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ccttgaatta ggcagtgggt tottagatat gatacaag acacaagcaa ccaatggaa
aataggtaaa ttggacttaa tcaagatttg aagctttgt gattgaaaag accctatcaa
gaaggtgaaa agataacctg cagaatggga gaaaatatt gcgagtcata tatatgata
ggggttgta tctggaatat ataaataact cttaaacac acaataagg agaaaaataa
atcaatttaa aaatgggt acggtttga atagacatt ctccaagaa gatagcaaa
tggctactaa gaacatgaaa aatctcaac attattattc attaggaaa tgaagtcaa
aatcacaatg agattccagt ttacaatcac taggatggct acaataaaaa gatggacaag

Homo sapiens

NP_000907.1 MEGALANIN AEPANASAP PGAEGRNTAG PPRNEALAR VEVAVLCLIL LLALSGNACV P

Oxytocin Receptor

216 3582

aacgagtgc ggtgaggatg tagagaaact gtagaaaatt taaattgttg gtgggaatgt
aaatgtgca cctgctttga aaaacagttt ggcagtacct caaaagttta aacgtagagt
gacctatga cccaggaatg caactcctag gtattatccc aagagaaatg aaaacgtaca
tacacacaa aacttgtaca caaatgttca tagcaacatt atttgaata gccaaaagt
ggaaacaacc caaatgtcta ccaactgatg aatgggaaat aaaatgttgt ctgtccacgc
aatggaacat tattagactc taanaagaaa tgaagtactc acacatgcca caacatggat
gagccttgaa aacttgttaa gtgaaagaag ccaggtgcaa aagccacat attgtctgac
tgcattgaaa tgcaatgtct aaaaatggag aatctatata gagtgaatat agattagcgt
ttgccagggc ctggaggctg tgagagatga ggcagtacta ctaagggttt ggggtttctt
tttcgggtga tgaataatgtt cgaataatgt ggtgattgtg cagcattttg agaattgact
aaaaaccaat gaactttaaa aataaaaaat aaacaaa

Homo sapiens

NM_002564

Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)

216 3589

cgccagagg caccgcgaga gagaagcgc agcgagctgg cgagagagc cccttgtggc A
agcagacta cctgcccaga aaaatgctgg aggtggggc tggcccagg cctggggacc
tggttttctt gttcccga gattccctg cagcccggtc caggtccagg cgtgtgcatt
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ggcccttcag caggtgtgct tgcagctgg tgcgttctt ctctacacc aacctttact
gcagatctt ctctctacc tgcacagcg tgcacgggtg tctggcgctc ttacgacctc
tgcgctcct ggcgtgggc cgggccgct acgctgcgc ggtggcggg gccgtgtggg
tgttggtgct ggcctgccag gccccgtgc tctactttgt caccaccagc ggcgcgggg
gcccgtaac ctgccacgac acctggcac ccgagctctt cagcgcctt gtggcctaca
gctcagtcct gctgggcttg ctctgcggg tgcctttgc cgtcatctt gctgtttagg
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acacctcaa cgcctatcac atggcctaca aggttaccg gccgctggc agtgcataca
gttgcttga cccgtgctc tacttcttg ctgggagag gctcgtacgc ttgcccag
atgccaaagc acccactgg ccagccctg ccaccccgcc tgcgcgagg ctgggctgc
gcagatccga cagaactgac atgcagagga taggagatgt gttgggcagc agtgaggact
tcaggcggac agagtccac cggctggta gcgagaacac taaggacatt cggctgtagg

[illegible]

200/448

219	3595	Purinergic Receptor P2Y1	NP_002554.1	MTEVLPVAVP NGDPAFLAG PGSSWGNSTV ASTAAVSSSF KCALTKTGEQ FYLPAVYIL P VFIFGLGNS VAIWMEVFHM KPWGSGISVM ENLALADFLY VLTLPALIFY YFNKTDWIFG DAMCKLQRFI FHNLYGSIIL FLTCISAHRY SGWYPIKSL GRLLKKNALIC ISVLWLLIIV VAISPILFYS GTGVKNKNTI TCYDTSDEY LRSYFIYSMC TVAMFCVPL VLLGICYGLI VRALIYKDLD NSPLRKSIIY LVIIVLTFA VSYIPFHVNK TNNLRARLDF QTPAMCAFND RVYATYQVTR GLASINSCVD PILYFLAGDT FRRRLSRATR KASRRSEANL QSKSEDMTLN ILPEFKQNGD TSL	Homo sapiens
220	3596	Purinergic Receptor P2Y5	NM_005767	ctgatgaaag tgcctccaaa ctgaaaattg gacgtgcctt tacgatggta agcgttaaca A gctccccactg cttctataat gactccttta agtacacttt gtaggggtgc atgttcagca tggtgtttgt gcttggggtta gtatccaatt gtgttgcat atacattttc atctgcgtcc tcaaaagtcog aaatgaaact acaacttaca tgattaaact ggcaatgtca gacttgcttt ttgtttttac ttacccttc aggtattttt acttcaaac acggaattgg ccatttggag atttactttg taagatttct gtgatgctgt ttatatacaa catgtacgga agcattctgt tcttaacctg tattagtgtg gatcgatttc tggcaattgt ctaccattt aagtcaaaaga ctctaagaac caaaagaaat gcaaaattg ttgcaactgg cgtgtgggta actgtgatcg gaggaagtgc accgcccgtt ttgttcagt ctaccactc tgaagggtaac atgcccctcag aagccctgct tgaataattt ccagaagcca catggaaaac atatctctca aggtttgtaa ttttcatcga aatagtggga ttttttattc ctctaattt aatgtaaact tgttctagta tggtgctaaa aactttaacc aaaccagtta cattaagtag aagcaaaaata acaaaaacta aggtttttaa aatgattttt gtacatttga tcatattctg ttctgtttt gttccttaca atatcaactc tattttatat tctctgtgga gaacacaaac atttggttaatt tgcctcagtag tggcagcagt aaggacaatg taccacatca ctctctgtat tgcgttttcc aactgttgtt ttgaccctat agtttactac ttatcatcgg acacaattca gaattcaata aaaaatgaaaa	Homo sapiens

221	3596	Purinerigic Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatggtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatttga caatgaatct gctgctgaa ataaaacat taggactcac tgggacagaa ctttcaag MSDLFLVFTL PFRIFYTTR NWPEGLLCK ISVLMFYTNM YGSIILFTCI SVDRELAIV PFRSKTLRTK RNAKIVCTGV WLTVIGGSAP AVFVQSTHSQ GNNASEACFE NFPEATWKTY LSRVIFIEI VGEFIPILN VTCSSMLKT LTKPVLRSR KINKYKLMK IFVHLIFCF CEVPYNINLI LYSIVRTQTF VNCSSWAAR TMYPTILCIA VSNCCFDPV YFYSDTION SIRMKNWSVR RSDRFSEVH GAENFIQHNL QTLRSKIFDN ESAA	Homo sapiens
222	3597	Purinerigic Receptor P2Y6	NM_004154	aaggacagag gaggggacct tctgtctcagc tggctgggag cagaggtggc ttgtctttt A cggaagaact ggttctgtg aatttctgct tatttccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt ttctgcttg cctgtcatct ggatagtgc taaaaatttg caaactgctt tctgtcagt gtcttgctca ttcttcatga cactctgat atgtctctca gtttctcat ctgtgctc tccagacttc tgccagaaca ttgcaacgga cagtttcagg cagagaactg actggcagca ggggctgctc cacgagtggg aatttctcc agcacttcac ggactgcaag cgaggcactt gtaactctt ggataacaag acctctgcca gaagaacctat ggctttggaa ggcggagtcc aggtgagga gatgggtgcg gtcctcagt agccctgccc tccctgaaca taggaacccc acctggcag ccatggaatg ggacaatggc agggccagg cctctgggtt gccacccc acctgtgct accgcagaaa cttcaagcaa ctgctgctc cactgtgta ttggcggtg, ctggcggtg gcctgcctgt gaacatctgt gtcattacc agatctgcac gtccgcgg gccctgacct gcacggcctg gtacacctta accttgcct tggctgacct gctatagcc tgcctcctgc ccctgctcat ctacaactat gcccaagggt atcactggcc ctttgggac ttgcctggcc gcctggtccg cttcctcttc tatgccaacc tgcacggcag cactctctc ctcacctgca tcagcttcca gcgtacctg ggcactgccc acccgtggc cccctggc aaactgggg gccgcggggc tgcctggcta gtgtgtgtag ccgtgtggtt ggcgtgaca acccgtggcc tgccacagc catcttgct gccacaggca tccagcgtaa ccgcaactgc tgcctatgacc tcagcccgcc tgcctggccc accactata tgcctatgg catggctctc actgtcatcg gcttctgct gcccttggc gccctgctgg cctgtactg tctcctggcc tgcgcctgt gccgcagga tggcccgcca gagcctgtgg ccagggagcg gcgtggcaag gcggcccgca tggccgtggt ggtggctgct gccttgcca tcagcttccct gcttttcc atcaccaaga cagcctacct ggcagtggc tcfacgcgg gcgtccctg cactgtattg gaggccttg cagcgcccta caaaggcacg cggccgtttg ccagtgcga cagcgtgctg gacccatcc tcttctactt caccagag agttctcgcc ggcagaccaca tgaactccta cagaaactga cagccaaatg gcagaggcag ggtcgctgag tctccaggt cctgggcagc cttcatatt gccatttgtt ccggggcacc aggagcccca ccaaccccaa accatggga gaattagagt tcagctcagc tgggcattgga gtaagatcc ctcaaggag ccagaagctc accaaaact atttctcag ccccttctt ggcacagacc ctgtgggcat ggagatggac agacctggc ctggctcttg agagggtccca gtcagccatg gagagctggg gaaacacat taaggtgctc acaaaaatac agtgtgact gtactgtcaa aa	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWNGTQQA LGLPPTTCVY RENFKQLLLP PVYSAVLAAG LPLNICVITQ ICTSRRLTR P	Homo sapiens
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	TAVYTINIAL ADLLYACSLP LITNYAOGD HWPEGFACR LVREIFYANL HGSILFITCI SFQYLGICH PYAWHRRGG RRAAWLVCA VWLATYQCL PTAIFAATG QNRRTVCYDL SPPALATHYM PYGMALTVIG FLPLFAALLA CYCLACRLC RQDGAEPVA QERRGKAARM AVVAATAFAM SFLPFHITKT AYLAVRSTPG VPCIVLEAFA AAYKGTBPFA SANSVLDPIIL FYFTQKKFRR RPHELLQKLT AKWQRQGR cctacgggtc catagtgtca gagtgggtga cccctgcagc cagcaggcct cctgaaaaaa A aagtcacatgg gtgacagaag attcatatgac ttccaattcc aagaticaaa ttcaagcctc agaccacaggt tgggcaatgc tactgccaat aatacttgca ttgttgatga ttccctcaag tataatctca atgggtgctgt ctacagtggt ttattcatct tgggtctgat acccaacagt gtctctctgt ttgtctctctg ttccgcgatg aaaaagagaa gtgagactgc tattttttac accaatctag ctgtctctga ttgtcttttt gtctgtacac taccttttaa aatattttac aacttcaacc gccactggcc ttgtgtgac accctctgca agatctctgg aactgcattc cttaacaaca tctatgggag catgctcttt ctacactgta ttagtgtgga tctgttctctg gccattgtct atccttttctg atctgtact attaggacta ggaggaaattc tggcattgtg tgtgctgggtg tctggatctt agtctcagt ggcgttattt cagcctcttt gtttccacc actaatgtca acaatgcaac caccactgc ttgaagggt tctccaaacg tgtctggaag acttatttat ccaagatcac aatattttat gaagtgttg ggtttatcat tctctataa ttgaatgtct ctgtctctc ttggtgtctg agaactcttc gcaagcctgc tactctgtct caaattggga ccaataagaa aaaagtactg aaaatgatca cagtacatat ggcagtcttt gtggtatgct ttgtacccta caactctgtc ctctctctgt atgccttgggt gcgtcccaa gctattacta attgcttttt ggaagatttt gcaagatca tgtaccaaat cactttgtgc cttgcaactc tgaactgttg ttttgacct tctatctatt acttaccct tgaatccttt cagaagtctt tctacatcaa tgcacacatc agaattggagt cctgttttaa gactgaaaaa cctttgacca caaagccttc cctccagct attcaaggag aagtgtgtga tcaaaaca aataatggtg gtgaattaat gctagaatcc acccttttagg tatgagaat gtgttcaggt ccagatatgg ttctctctat aatttttct atgtctataa ctaaaagatt gaagctaag atactgagaa taatgcacca aatccagtc gatacattg ttgaaagta tactgtagag tttttattgc tgtttttgtc agtaattata ggtcaaatct aattacaaca accaagatgg attgccaac tcttctgctt ggttggaatt tcatgtatc gcattatcca ggtggctagt ggcatttgat aatatagaga tgactttgaa actttcaaaa aggtatttct attccaatga tatttggtaa ttaggttggg cctataaata tagaacaat tcaggggattt ttaaaaaatt gtgtttactc tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttttt tttagcacaag aatatatttta gccataacatt attaaaga aatgtgtcaa atttttaaca ttggtaaaat atgttatgtg ccttttgaaa acagaaaaa aattgcgttg gcatgtact ggttggaag aaaaagaaa ttaacaggat ttacacatt ataatacca gcagtgtgag tttaaaaaac ttogttgttt ttacacaaa ttaaaatttt catgtcaaac ttcaagcca gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacitaa aacaggaaag tgtcaataaa aaactttgag caacaccaac atattttttc ttaaaatgtc acgttatctt cattttggga aatagggttc tataaatat ttatctctcc tgttatctt tggagcacag cacagccaaga aagggggtgc atttgtgccc aggtcaggag caaattgaaa aaaaaataa	Homo sapiens

225	3599	G Protein- Coupled Receptor 23 (GPR23)	NP_005287.1	agtaatacta aaaaatcaaa ctataaaccc aaacattta ttaaacctg aattaactt tittggagg aggagtagag atataaac tgaaataact tatctttct tatcgaattt tggagcctaa tatagccagg agtgctgaa tttgtgccc tggattggaa ccaataaaaa aaaaaaaaaaa aaatttcct	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTH2)	NM_005048	MGDRRFIDFQ QDSNSSLRP RLGNATANNT CIVDSEKYN LNAVSVWF ILGLITNSVS P LFVCFRNM RSETAIFTN LAVSDLLFVC TLPKIFYNF NRHWPQDITL CKISGTAFLT NIYGSMLFIT CISOVDRELA VYPRSRTR TRNSAIVCA GWILVLSGG ISASLFTTN VNNATTCTFE GFSKRWKTY LSKITIFIEV VGFIPLILN VSCSSVVLRT LRKPATLSQI GTNKKKVLKM ITVHMAVFW CFVPYNSVLF LYALVRSQAI TNCFLERFAK IMYPITLCIA TLNCCFDPI YFTLESFQK SFYINAHIRM ESLEXTETPL TTKPSLPAIQ EEVSDQTNN GGELMESTF	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTH2)	NM_005048	ggccggtggc cggggccga ccacccagc tgcggtcgt tactggccac aagtttgctc A tgggcccagc aagttggcaa ctgggaagct tctccgggc tctggaggag ggtccctgct tcttctaca gctgttcgg gcatggccg gctggggcg tgcctccacg tctggggttg gctaagtct ggcagctgcc tctggccag agccagctg gattctgatg gcaccattac tatagaggag cagattgtcc ttgtgctgaa agcgaagta caatggaac tcaacatcac agctcaactc caggaggag aagtaattg tttcctgaa tgggatggac tcaattgttg gcccaggga acagtgggga aatatcggc tgttcactg cctcctata tttatgactt caaccataaa ggagtgtctt tccgacactg taacccaat ggaacatggg attttatgca cagcttaaat aaacatggg ccaattattc agactgcctt cgtttctgc agccagatat cagcatagga aagcaagaat tcttgaacg cctctatgta atgtataccg ttggctactc catctctttt ggttctctgg ctgtggctat tctcatcatt ggttacttca gacgattgca ttgcactagg aactatatac acatgcacti atttgtgtct ttcagtctga gagctacaag catctttgtc aaagacagag tagtccatgc tcacatagga gtaaggagc tggagtccct aataatgcag gatgaccac aaattccat tggagcaact tctgtggaca aatcacata tatcgggtgc aagattgtg ttgtgatgtt tatttacttc ctggctacaa attattattg gatactgtg gaaggtctct acctgcataa tctcatcttt gtggctttct tttcggacac caataactg tggggcttca tcttgatagg ctgggggttt ccagcagcat ttgttgccagc atgggctgtg gcacgagcaa ctctggctga tgcgggtgc tgggaactta gtgctggaga catcaagtgg atttatcaag cacgatctt agcagctatt gggctgaatt ttattctgtt tctgaatacg gttagagttc tagtaccac aaactgggag accaatgcag ttgggcatga cacaaggag caatacagga aactggccaa atcgcactg gtcctggctc tagtcttgg agtgcattac atcgtgttgg tatgcctgc tcaactctc actgggtcgt ggtggagat ccgcatgcac tgtgagctct tcttcaactc ctctcagggt tcttttgtt ctatcatc ctgtactgc aatggagagg ttcaggcaga ggtgaagaag atgtggagtc ggtggaatct ctcctggac tggaaaagga cacgacctg tggcggccg agatgggct cagtgtcac cacctgacg cacagacca gacccagtc acaggtggcg gccagcac gcatggtgct tatctctggc aaagctgcca agatgccag cagacagcct gacagccaca tcaatttacc tggctatgtc tggagtaact cagagcagga ctgcttgcga cactcttcc acgaggagac caaggaagat agtgggagc aggagatga tattctaag gagaagcctt ccaggcctat ggaatctaac ccagacactg aaggatgcca aggaaaaact gaggatgttc tctgaatgga	Homo sapiens

Homo
sapiens

227 3638 Parathyroid NP_005039.1
Hormone
Receptor 2
(PTH2)
catttggtggc tgactttcat gggctgggtcc aatggctgggt tgggtggag gggctgggtg
atactcctat gcttgagttc aaagctgaa aattcagta aggtgttact taataatagt
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gctctgtgat tgttcatttt tttctgtac ttttgggtag aaaaaagatt caatgtcttg
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attttccttt tagaaactag tattctctta tttctactt taatgtactt ttafcactgc
atttatattg cctgtgcata ggagcaatta ggatctaaaa aatatatgg gaagataaaa
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acatcccttc ttttgaatgg cctcttcttg accagcaga cctcaggctc tcaatcttcc
ttctttgtaa accatgtcat gtggaagat ttcctcagtt agtgagcttg tctctgcaaa
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tttgagctgt tactacattg tacatggcat gtgggatcaa ttaaaaaatt gtttaaaaa
t
228 3640 Parathyroid NM_000316
Hormone
Receptor 1
(PTH1)
GNCFFEWDLG ICWPRGTGK ISAVPCPPYI YDFNHKGVAF RHCNPNGTWD FMHSLNKTWA
NYSDDLRFQ PDISGKQEF FERLYMYTV GYSISFSLA VAILIIGYFR RLHCTRNYIH
MHLEVSFMR ATTSIFVKDRV VHAHVSVKEL ESLIMQDDPQ NSIEATSVDK SQYIGCKIAV
VMFIYFLATN YWIIIVEGLY LHNLIFAFF SDTKYLWGF I LGWGFPAF VAAWAVARAT
LADARCWELS AGDIKWIYA PILAIGLNF ILFLNTVRVL ATKIWETNAV GHDTKQYRK
LAKSTLVVL VFGVHYIVF CLPHSFTGLG WEIRHCELF FNSFQFFVS ILYCNCGEV
QAEVKKWSR WNLSDWKRT PPGSRRCGS VLTVTHTSTS SOSQVAATR MVLISGKAAK
IASRQPDSHI TLPGVVWSNS EQDCLPHSFH EETKEDSRQ GDDILMEKPS RPMESNPDTE
GCGEDEDVL
cggagggaag cggcctagg cgggtggcat ggggaccgcc cggatcgac cggcctggc A
gtcctgtctc tgggtggcgc tgcctagtc cgcgtacgcg ctggtggatg cagatgacgt
catgactaaa gaggaacaga tcttctgtct gcacgtgct caggcccatg gcgaaaaacg
gctcaaggag gtctctgaga gccagccag cataatggaa tcagacaagg gatgacatc
tgcgtccaca tcagggaagc ccactggcag caggtaaccg gggcgccct gtctgcccga
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tcgggactac attatgact tcaatcaca aggccatgcc taccgacgt gtgaccgcaa
tggcagctgg gagctggtc ctgggcaca caggacgtgg gccactaca gcgatgtgt
caaatcttc accaatgaga ctctgtaacg ggaggtgttt gaccgctgg gcagtattta
cacctgggc tactcgtgt cctgctgct cctcacctga gctgtgctca tcttggccta
ctttaggcgg ctgcactga cgcgcaacta catcacatg cactgttcc tgtcttcat
gtctgcgcc gtgagcatct tcttcaagga cgtgtgtctc tacttggcg ccacgttga
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tgcacacgcc gctgcggct acgcgggctg cagggtggct gtgaccttct tcttactt
cctggccacc aactactact gattctgtt ggaggggctg tactgcaca gccatctt

Homo
sapiens

228 3640 Parathyroid NM_000316
Hormone
Receptor 1
(PTH1)
cggagggaag cggcctagg cgggtggcat ggggaccgcc cggatcgac cggcctggc A
gtcctgtctc tgggtggcgc tgcctagtc cgcgtacgcg ctggtggatg cagatgacgt
catgactaaa gaggaacaga tcttctgtct gcacgtgct caggcccatg gcgaaaaacg
gctcaaggag gtctctgaga gccagccag cataatggaa tcagacaagg gatgacatc
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tgaggaggac agggaggcac ccactggcag caggtaaccg gggcgccct gtctgcccga
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tcgggactac attatgact tcaatcaca aggccatgcc taccgacgt gtgaccgcaa
tggcagctgg gagctggtc ctgggcaca caggacgtgg gccactaca gcgatgtgt
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cacctgggc tactcgtgt cctgctgct cctcacctga gctgtgctca tcttggccta
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gtctgcgcc gtgagcatct tcttcaagga cgtgtgtctc tacttggcg ccacgttga
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tgcacacgcc gctgcggct acgcgggctg cagggtggct gtgaccttct tcttactt
cctggccacc aactactact gattctgtt ggaggggctg tactgcaca gccatctt

229	3640	Parathyroid Hormone Receptor 1 (PTHRL)	NP_000307.1	<p>catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctggggtct</p> <p>gcccgtgtc ttctgtggtcgtg ttgtgggtcag ttgtcagagct accctggcca acaccgggtg</p> <p>ctgggacttg agctccggga acaaaaagtg gatcatccag gtgccaatcc tggcctccat</p> <p>ttgtctcaac ttcatctctt tcatcaatat cgtcgggtg ctgcaccca agctcgggga</p> <p>gaccaacgcc ggcgggtgtg acacacggga cagttaccgg aagtgtctca aatccacgt</p> <p>ggtgtcatg cccctctttg gcgtccacta cattgtcttc atggccacac catacacga</p> <p>ggtctcaggg acgctctggc agtccagat gactatgag atgtcttca actccttcca</p> <p>gggattttt gtgcgaatca tatactgtt ctgcaatggc gaggtaaca ctgagatcaa</p> <p>gaaatcttg agcgcgtgga cactggcact ggactcaag cgaaggcac gcagcgggag</p> <p>cagcagctat agctacggcc ccattggtgc ccacaaagt gtgaccaatg tcggcccccg</p> <p>ttgtggactc ggcctgcccc tcaagccccg cctactgcc actgcacca ccaacggcca</p> <p>ccctcagctg cctggccatg ccaagccagg gaccacagcc ctggagaccc tcgagaccac</p> <p>accacctgcc atggctgctc ccaaggacga tgggttcttc aacggctcct gctcaggcct</p> <p>ggacgaggag gctctgtggc ctgagcggc acctgccctg ctacaggaag agtgggagac</p> <p>agtcatgtga ccaggcgtg gggctggac ctgtgacat agtggatgga cagatggacc</p> <p>aaaagatggg tggttgaatg atttccact cagggccttg ggccaagagg aaaaacaggg</p> <p>aaaaaagaa aaaaaaaga aaaaggaa</p> <p>1 MGTARAPGL ALLLCCPVLS SAYALVDAD VMTKEEQIFL LHRQAQCEK RIKEVLQRP P</p> <p>SIMESDKWT SASTSGPKR DKASGKLYPE SEEDKEAPTG SRYGRCLP EWDHILCWPL</p> <p>GAPGEVAVP CDYIYDFNH KGHAYRRCR NGSWELVPGH NRTWANYSEC VFRLTNETRE</p> <p>REVEDRLGMI YTVGYSVSLA SLTVAVLILA YFRRUHCTRN YIHMFLFS MRAVSIFVK</p> <p>DAVLYSGATL DEARLITEE LRAIAQAPP PATAAGYAG CRVAVTFYLY FLATNYIYWL</p> <p>VEGLYHSLI FMAFFSEKXK LWGTFVGGW LPAVFVAVV SVRATLANTG CWDISSGNKK</p> <p>WIIQVPIIAS IVLNFILFIN IVRLATKLR ETNAGRCRDR QQYRKLKST LVIMPLFGVH</p> <p>YIVFMATPYT EVSGTLWQVQ MHYEMLNSF QGFFVAILYC FCNGEVQAEI KKSWSRWTLA</p> <p>LDFKRKARSG SSSYSYGPVW SHTSVTNVGP RVGLGLPLSP RLLPTATNG HFQLPGHAKP</p> <p>GTPALETLET TTPMAAAPKD DGFLNGSCSG LDEEASGPER PPALLQEW E TVM</p> <p>agccacagaga cacattgggg ctgacctgcc gctgctgtca gtgggagacc agtgggtgctg A</p> <p>gccaagaagt gtcattggctg gtgtcgtgca cgtttccctg gctgtcact gggggcctg</p> <p>tccgtggggc cggggcagac tccgcaagg acgcagacc tgaagtccg cggccacag</p> <p>acacattggg gctgacctgc cgtgtgttc acgtttccct ctcctgtgc ctatggccc</p> <p>tgctatggct ggtgtgtgc acgtttccct ctcctgtgc ctcctgtgc ctatggccc</p> <p>tgccatgcat tctgactgca tcttcaagaa ggagaagcc atgtgcttg agaagatcca</p> <p>gagggccaat gagctgatgg gcttcaatga ttccttcca gctgtctg gcatgtggga</p> <p>caacatcacg tgttgaagc cgcacctatg ggtgagatg gctcgtgtca gctgcccga</p> <p>gctcttcga atcttcaacc cagaccaagt ctggagacc gaaaccttg gagagtctga</p> <p>ttttgtgac agtaactct tagatcttc agacatgga gtggtgagcc ggaactgac</p> <p>ggaggatggc tggtcgggac ccttccctca ttacttgat gcctgtgggt ttgatgaata</p> <p>tgaatctgag actggggacc aggtattata ctactgtca gtgaaggccc tctacaggt</p> <p>tggtacagc aatccctcg tcaacctcac cactgcatg gtcactctt gctgcttcg</p> <p>gaagtgcac tgcacacga acttcatcca catgacctg ttgtgtcgt tcatgtgag</p>	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	<p>agccacagaga cacattgggg ctgacctgcc gctgctgtca gtgggagacc agtgggtgctg A</p> <p>gccaagaagt gtcattggctg gtgtcgtgca cgtttccctg gctgtcact gggggcctg</p> <p>tccgtggggc cggggcagac tccgcaagg acgcagacc tgaagtccg cggccacag</p> <p>acacattggg gctgacctgc cgtgtgttc acgtttccct ctcctgtgc ctatggccc</p> <p>tgctatggct ggtgtgtgc acgtttccct ctcctgtgc ctcctgtgc ctatggccc</p> <p>tgccatgcat tctgactgca tcttcaagaa ggagaagcc atgtgcttg agaagatcca</p> <p>gagggccaat gagctgatgg gcttcaatga ttccttcca gctgtctg gcatgtggga</p> <p>caacatcacg tgttgaagc cgcacctatg ggtgagatg gctcgtgtca gctgcccga</p> <p>gctcttcga atcttcaacc cagaccaagt ctggagacc gaaaccttg gagagtctga</p> <p>ttttgtgac agtaactct tagatcttc agacatgga gtggtgagcc ggaactgac</p> <p>ggaggatggc tggtcgggac ccttccctca ttacttgat gcctgtgggt ttgatgaata</p> <p>tgaatctgag actggggacc aggtattata ctactgtca gtgaaggccc tctacaggt</p> <p>tggtacagc aatccctcg tcaacctcac cactgcatg gtcactctt gctgcttcg</p> <p>gaagtgcac tgcacacga acttcatcca catgacctg ttgtgtcgt tcatgtgag</p>	Homo sapiens

[illegible]

233	3844	Apelin Receptor	NP_005152.1	ggtggagaac agatgcacga gaaatccatc cctacagcc aggagaccct tgtggttgac tag MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPATYMLVFL LGTTGNGLVL WTVFRSREK P RRSADIFIAS LAVADLTFV TFLPMATYTY RYDWPFGTF FCKLSYLIIF VNMYSVTFCL TGLSFDRLA IVRPVANARL RLRVSGAVAT AVLWVLAALL AMPVMVLRIT GDLENITKVQ CYMDYSMAT VSSEAWEVG LGVSTTVGF VPFITMLTC YFFIAQTIAI HFRKERIEGL RKRRLLSII VLVVTFALC WMPYHLVKTLYMLGSLHWP CDFLELMNI PPYCTCISYV NSCLNPFLLA FDFPRFRQAC TSMCLCGQSR CAGTSHSSSG EKSASYSSGH SQGPGPNMGK GGEQHEKSI PYSQETLVD	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	gaattcggca cgagtcaggg aagcagcccc ggcggccagc aggagctca ggacagagca A ggctccctgg gaagcctccg ggtgataggg gtgtccagc tgcggcgctc tgggggttca gagggggatc ttgaatgaac aatgaatga actgttttct gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctcccaac agcctcgagt ggcctgcagt cacagggaac cctcaggaag acctccggg cagagaccag agggaaagccc atctctccag cagaactgct tggatttttc taccaggagg ctacagggtc tgcaacaatg atagcagaag ctgatggcat ctagagatct aggtcgggac tagcacagca tcactttcac cactttctgt tggtcacagc aactcaccat gccagtgcag attcaagggg aggagaata gagtcacatt ctgtatggga ccctgtgacat agaatggagg atgaagatta caacacttcc atcagttacg gtgatgaata cctgtattat ttagactcca ttgtggtttt ggaggactta tcccccttgg aagccagggg gaccaggatc ttctctgggtg tggctcacag catcgtctgc ttctctggga ttctgggcaa tggctctggg atcatcattg ccacctcaa gatgaagaag acagtgaaca tggctctggt cctcaacctg gcagtggcag atttctgtt caactcttc ctcccaatcc atatcaccta tgcggccatg gactaccact ggttttctgg gacagccatg tgcaagatca gaacttctct tctcatccac aacatgttca ccagctctt cctgctgacc atcatcagct ctgacgctg catctctgtg ctctctctg tctgttccca gaaccacgc agcgttcgcc tggcttacat ggctgcatg gtcatctggg tctgtgcttt ctcttgagt tccccatctc tctgtcttcg ggacacagcc aacctgcag ggaaaatata ctgcttcaac aacttcagcc tgtccacacc tgggtcttcc tctgtgccc ctcactccca aatggacct gtgggtgata gccggacat ggtgtgtgact gtacccgct tctctgttg ctctctgttc ccagtctca tcatcacagc ttgtacctc acctcgtgt gcaactgca gcgcaacgc ctggccaaga ccaagaagcc ctccaagatt atttgacca tcatcattac ctcttctc tctgtgtgcc cctaccacac actcaacctc cttaggtcc accacactgc catgcttggc tctgtcttca gctgggttt gccctggcc actgcccctt ccattgccaa cagctgcatg aaccctatc tctgtgttt catgggtcag gactcaaga agttcaagg ggcctcttc tctgcctgg tcaatgctct aagtgaagat acaggccact ctctctacc cagccataga agctttacca agatgtcatc aatgaatgag aggaacttca tgaatgagag ggagaccggc atgctttgat cctcactgtg gaaccttca atgactctc tcaacctagg gacaccaag gatatgtctt ctgaagatca aggcagaagc ctctttagca tccaccaatt ttcactgcat tttgcatggg atgaacagtg ttttatgctg ggaatctagg gcctggaacc cctttctct agtggacaga acatgctgtg ttcatatag ccttgagcta gcaatttatg ctcttgagg ggccagcctt gactgactca aagcaaaaaa ggaagaattc	Homo sapiens

235	3845	Chemokine- Like Receptor 1 (CMKLR1)	NP_004063.1	MEDEDYNTSI SYGDEYDPYL DSIVVLEDLS PLEARVTRIF LVVVYSIVCF LGILNGLVI P IIATFRMKKT VMWFLMLA VADLEFNVL PIHITYAAMD YHWVFTGAMC KISNFLLIHN MFTSVLLTI ISSDRCSIVL LPWWSQNHRS VRLAYNACMV IWVLAFLSS PSIVFRDTAN LHGKISCFNN FSLSTPGSS WPTHSQMDPV GYSRHWVTV TRFLCGELVP VLIITACYLT IVCKLQNRLL AKTKKPKFI VIIITFFLC WCPYHFLNLL ELHHTAMPGS VFSGLPLAT ALAIANSCMN PLYVFMGQD FKKEKVALFS RLVNALSEDT GHSSYPSHRS FTMSSMNER TSMNERETGM L	Homo sapiens
236	3846	Sphingolipid Receptor Edg1	NM_001400	gtcgggggca gagcaagat ggaagcgag ccgtacagat cccggggtctt cggaaagcaa A cttcgcctcg ctggagcgag gctgcggttt ccgagggcctt ctcagccaa ggaaagcta cacaanaagc ctggatcact catogaacca cccctgaagc cagtgaaggc tctctgcctt cgccctctag cgttcgctcg gattagcgcc acccgctt cctggggaca cagggttggc accatggggc ccaccagcgt cccgctggtc aaggccacc gcagctcggt cctcgactac gtcaactatg atatcatcgt ccggcattac aactacacgg gaaagctgaa tatcagcgcg gacaaggaga acagcattaa actgacctcg gtggtgttca ttctcatctg ctgctttatc atcctggaga acatctttgt ctgtctgacc atttgaaaa ccaagaaatt ccaccgaccc atgtactatt ttattggcaa tctggccctc tcagacctgt tggcaggagt agcctacaca gctaactcgc tctgtcttgg ggccaccacc tacaagctga cctccgccca tgggtttctg cgggaaggga gtatgtttgt ggccctgtca gctcgtgtg tcagtctcct gccactcgcc attgagcgtt atatcacaat gctgaaaaatg aaactccaca acggggagcaa taacttcgc ctcttcctgc taatcagcgc ctgctgggtc atctccctca tctgggtgg cctgcctatc atgggctgga actgcatcag tgcgtgttcc agctgttcca ccgtgtgcc gctctaccac aagcactata tctcttctg caccaggtc ttcaactctg ttctgctctc catcgtcatt ctgtactgca gaactactc ctgtgtcagg actcggagcc gcgcctgac gtcccgcaag aacatttoca aggcagcgc cagctctgag agtgcgtgg cgtgctcaa gaccgtaatt atcgtctcga gctcttctc cgcctgctgg gcaccgtctt tcaactcgtt cctgctggat gtgggctgca aggtgaagac ctgtgacatc ctcttcagag cggagtactt cctggtgtta gctgtgctca actcgggcac caaccctc atttacctc taccacaaa ggagatgcgt cgggccttca tccggtatcat gtctgtctgc aagtgcctga gcggagactc tgcgggcaa ttcaagcgac ccatcatcgc cggcatggaa ttcagccgca gaaatcggga caattcctcc caccocaga aagacgaagg ggacaacca gagaccatta tctctctgg aaactcaac tctcttctt agaatggaa gctgtccacc caccggagc gctcttact tggctcgctg ccaccocagt gtttggaata aaactcttgg gcttcgactg ctgcccagga ggagctgctg caagccagag ggaggaagg ggagatacag aacagcctgg tgggtcgggg tgttgggtgg tagagttagt tccgttgaac aatgcactgg gaaggttggga gatcaggctc cggcctggaa tatatatctt accccctgg agctttgatt ttgcactgag ccaagggtcc ageattgtca agctcctaaa ggggtcattt ggccctcctt caaagactaa tgcctccatg tgaagcgtc tcttgtctg gagctttgag gagatgtttt ccttcaattt agtttcaaac ccaagttagt gtgtgcaatt ctgcttcttt agggatgccc tgtacatccc acaccacc ctccttccc ttcatacccc tctcaacgt tcttttactt tatactttaa ctacctgaga gttatcagag ctggggttgt ggaatgatcg atcatctata gcaaatgggc tatgtttagt acgtaggctg tgggaagatg aagatgggtt ggagggtgaa acaatgtccc ttcgctgagg ccaagtttc	Homo sapiens

240	3848	C-C Chemokine Receptor 9	NM_006641	<p> NLPDCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSSRKVA NHHNSERSMA LLRTVVIVVS VFIACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SAMNPVIYTL ASKEMRRRAFF RLVCNCLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSPK VKEDLPHTDP SSCIMDKNAA IQNGIFCN gcccctcatc ccaggcgag agcaaccag ctcttcccc agacactgag agctgggtgtt A gctgtgctgc ccaggggag ttgcacgccc ctcccaagc cctattecta acatgggtga tgactatggc ttggaatcca catctccat ggaagactac gttaaactca acttcaactga cttctactgt gagaaaaaca atgtcaggca gtttgagc catttctccc cacccttgta ctggctcgtg ttcatcgtgg gtgccttggg caacagtctt gttatccttg ttacttggtga ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttgcaa ttgtgacct cctcttttct gtactcttc cttctgggc cattgtgct gtgaccagt ggaagtcca gaccttcacg tgcaagggtg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt gctgacatg tgcatcagc tggacaggta cattgccatt gccaggcca tgagagcaca tacttggagg gaaaaaaggc ttttgtacag caaatgtgtt tgctttacca tctgggtatt ggcagctgct ctctgcaccc cagaaatctt atacagccaa atcaaggagg aatccggcat tgctatctgc accatgggtt accctagcga tgagagcacc aactgaaagt cagctgtctt gacctgaag gtcatcttgg ggttcttctt tccctctgtg tcatggctt gctgtctatc catcatcatt cacacctga tacaagccaa gaagtcttcc agcacaaa gcttaaaagt gacctcact gtctcgaccg tctttgtctt gtctcagttt cctacaaact cctttttgtt ggtgcagacc atgacgcct atgccatgtt catctceac tggccgttt ccaccaacat tgacatctgc tccaggta cccagacct cgccttcttc cacagtgtcc tgaacctgt tctctatgt tttgtgggtg agagattccg ccgggatctc gtgaaaaacc tgaagaactt gggttgcatc agccaggccc agtgggttct atttacaagg agagaggga gcttgaagct gtcgtctatg ttgctggaga caacctcagg agcactctcc ctctgagggg tcttctctga ggtgcagtgt tcttttgaa gaaatgagaa atacagaac agtttcccc ctgatgggac cagagagagt gaaagagaaa agaaaactca gaaagggatg aactgaaat atagtattac ttgtagtcag aatttgccaa agcaaatatt tcaaaatcag ctgactagt caggaggctg ttgattggct ctgactgtg atgcccga tctcacaagg agactaagg accggcactg tggagcacc tggctttgccc actgcggga gcatcaatgc cgtgcctct ggaggagccc ttggattttc tcatgcaat gtgaacttct tggccttcag ttctcatgct gccttcca aaaggggaca cagaagcaat ggctgtgtgt acagaccga aaagcagaaa gtttctgtaa aatgtccatc ttgggaaat ttctacctt gctcttggc ctgataaacc atgccaggct ttatagattc ctgactctaga acctttccag gcaatctcag acctaatctt cttctgttct cctgttctctg ttctgggcca gtgaaggctc ttgttctgat ttgaaaaa tctgcaggtc ttgccagtga acctctggac aactgaccac acccaagg catccaaagt ctgttggtt ccatccatt tctgtgtcct gctggaggtt ttaacctaga caaggattcc gcttattctt tggtatgtgt acagtgtct tccatggcct gagcaggag attataacag ctgggttcgc aggagccagc ctggccctg ttgtaggtt ttgtgttga gtggcacttg ctttgggtcc acctctgtc tgctccctag aaaaagggtt ggttcttttg gccctcttct ttctgagggc cactttatc tgaggaatac agtgagcaga tatgggcagc agcaggtag ggaagggg tgaagcgcag gcttggctgg aaggctattt acttctatgc ttctctttt cttactctat </p>	Homo sapiens
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241	3848	C-C	NP_006632.2	SMEDYVNFN	FTDFYCEKNN	VROFASHFLP	PLYWLVFIVG	ALGNSILVILV	P	Homo sapiens
		Chemokine		YWYCTRVKTM	TDMFLMLAI	ADLLFLVTLF	FWALAAADQW	KFOFMCKKV	NSMYKMFYS	
		Receptor 9		CVLLINCISV	DYIAIAQAM	RAHTWREKRL	LYSRMVCFTI	WVLAALCIP	EILYSQIKEE	
				SGLIACTMWY	PSDESTKLKS	AVLTIKVLIG	FFLPEVVMAC	CYTIILHTLI	QAKKSKHKA	
				LKVITIVLTV	FVLSQFPYNC	ILIVQTIDAY	AMFISNCAVS	TNIDICFQVT	QTIAFFHSCL	
				NPVLVVFGE	RFRRDLVKTL	KNIGCISOAQ	WVSFTRREGS	LKLSMMLLET	TSGALS	
242	3849	G Protein-Coupled Receptor GPR1	NM_005279	atggaagatt	tgaggaaac	attatttga	gaatttga	actattccta	tgacctagac	A
				tattactctc	tgagtgctga	tttgaggag	aaagtcacg	tgaggattgt	tcactgggtc	
				tccttggtgt	tatatgttt	ggcttttgtt	ctgggaattc	caggaaatgc	catcgtcatt	
				tggttcacgg	ggctcaagtg	gaagaagaca	gtcaccactc	tgtgtttcct	caatctagcc	
				attggcgatt	tcatttttct	tctctttctg	ccctgtaca	tctcctatgt	ggccatgaat	
				ttccactggc	cccttggcat	ctggctgtgc	aaagccaatt	ccttcaatgc	ccagttgaac	
				atgtttgcc	gtgttttttt	ccgacagtg	atcagcctgg	accactatat	ccacttgatc	
				catcctgtct	tatctcatcg	gcacgaacc	ctcaagaact	ctctgattgt	cattatatcc	
				atctggcttt	tggtctctct	aatggcggt	cctgcccctg	acttcoggg	caactgtggag	
				ttcaataatc	atactctttg	ctataacaat	tttcagaagc	atgacactga	cctcactttg	
				atcaggcacc	atgttctgac	ttgggtgaaa	tttatcattg	gctatctctt	ccctttgcta	
				acaatgagta	tttgctactt	gtgtctcatc	ttcaaggta	agaaggaac	agtcctgac	
				tcagtaggc	atttctggac	aattctggtt	gtggtttgtg	cccttctgtg	ttgctggact	
				ccctatcacc	tgtttagcat	ttgggagctc	accattcacc	acaatagcta	ttccccacc	
				gtgatgcagg	ctggaaatccc	cctctccact	ggtttggcat	tcctcaatag	ttgcttgaac	
				cccatccttt	atgtccta	tagtaagaag	ttccaagtc	gcttccggtc	ctcagttgct	
				gagatactca	agtaacacact	gtgggaagtc	agctgttctg	gcacagtga	tgaaacagctc	
				aggaactcag	aaaccaagaa	tctgtgtctc	ctggaaacag	ctcaataa		
243	3849	G Protein-Coupled Receptor GPR1	NP_005270.1	MEDLEETLFE	EFENYSYDLD	YYSIESDLEE	KVQLGVVHW	SLVLYCIAFV	IGIPGNAIVI	P
				WFTGLKWKKT	VTTLWFLNLA	IADFIPLFL	PLYISYVAM	FHWPFILWC	KANSFTAQLN	
				MFASVFTLV	ISLDHYIHLI	HPVLSHRHT	LKNSLIVIF	IWLLASLIG	PALYFRDTVE	
				FNNHTLCYNN	FQKHDPDLTL	IRHVLTVWK	FIIGYLFPLL	TMSICYICLI	FKVKKRTVLI	
				SSRHFVTLV	VVAFVVCWT	PYHLFSIWEL	TIHNSYSHH	VMQAGIPLST	GIAFLNSCLN	
				PILYVLISKK	QPARERSVA	EILKYTLWEV	SCSGTVSEQL	RNSETKNLCL	LETAQ	
244	3850	G Protein-Coupled Receptor 10 (GPR10)	NM_004248	atggcctcat	cgaccactcg	gggcccacg	gtttctgact	tattttctgg	gctgcccgcg	A
				gcggtcacaa	ctcccgcgca	ccagagcgca	gaggcctcgg	cgggcaacgg	gtcgggtgct	
				ggcgcgacg	ctccagccgt	cagcccttc	cagagcctgc	agctggtgca	tcagtggaag	
				gggctgacg	tgctgctcta	cagcgtcgtg	gtggtcgtg	ggctggtggg	caactgctg	
				ctgggtgctg	tgatcgccg	ggtgcgcgg	ctgcacaacg	tgacgaactt	cctcatcggc	
				aacctggcct	tgccgcagct	gctcatgtgc	accgctcgg	tgccgctcac	gctggcctat	

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	<p>gccttcgagc cagcggtgtg ggtgttcggc gggcgctgt gccacctggt cttcttcctg cagcggtca cgtctatgt gtggtgttc acgtcacca ccatcgagt ggaccgtac gtcgtgtgg tgcaccgct gaggcgggc atctcgctgc gccacgagc ctagctgtg ctggccatct gggcgtgtc cgtggtgtg gctggtgctg ccgctgtga cactatacac gtggagctca agcgcacga cgtgcgctc tgcgaggagt tctgggctc ccaggagcgc cagcgccagc tctacgctg ggggtgtgtg ctgtcacct acctgctccc tctgctgtg atctctctgt cttacgtcgg ggtgtcagt agctccgca accgctgtg gccgggtgc gtgaccaga gccaggcga ctgggaccg ctcggcgcc gccgacctt ctgcttctg gtggtgtgtg tgggtgtgtt cgcgtctgc tggctgctg tgcactctt caacctgtg cgggacctg accccacgc catcgacct tagccttgg gctggtgca gctgctg cactgctg ccatgagttc gctgtctac acccttca tctacgctg gctgacgac agcttcgcg aggagctcg caaactgtg gctgcttgc ccgcaagat agcccccat ggccagaata tgaccgtcag cgtggtcctc tga</p>	Homo sapiens
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	<p>atgaatgaag acctgaagt caattaagc gggctgctc gggattattt agatcgctt A gctgcggaga acatctcgc tgcgtctcc tcccggttc ctgctgtaga gccagagcct gagctcgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacct catctcctg gaaaatgcca ttgtgtctct tatctcttc cacaaccca gctgagagc accatgttc ctgctaatag gaagcctgc ttgtgcagc ctgctggcg gcatggagt catcaccaat ttgtttttg cctacctgct tcaagtcagaa gccaccaagc tggtaacgat cggcctcatt gtcgctctt tctctgctc tgtctgcagc ttgtggcta tcaactgtga ccgtacctc tcaactgact acgtctgac gtacattcg gagagagcg tcaactttac ctatgtcag ctcgctatgc tctgggggac ctccatctgc ctggggtgc tggcgtcat gggctggaac tgccctcgag acgagtcac ctgagcgtg gtcagaccg tcaccaagaa caacgggccc atctctcgg tgccttctt cttcatgtt gcgctcatgc ttcagctcta catccagatc tgtaagattg tgatgagga cgcctcatc atagcctgc agcaccatt cctggccag tgcactatg tgaccaccg gaaagggtc tccacctgg ctatcatctt gggagcgtt gctgctgtg tgatgctt caccctctat tcttgatag cggattacac ctaccctcc atctataact acgcaacct cctgcccgc acctacaatt ccatcatcaa cctgtcata tatgcttca gaaaccaaga gatccagaa gcgctctgtc tcaattgtg cggctgcatc ccgtccagtc tgcgccag agcgctcg cccagtgatg ttag</p>	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1	<p>MNEDLKVNLS GLPRDYLDAA AENISAAVS SRPAVEPER ELVNPWDIV LCTSGTLISC P ENAIIVLIIF HNPRLAPMF ILIGSLALAD ILAGIGLITN FVFAYLQSE ATKLVITGLI VASFSASVCS ILAIVTDRL SLYALTYHS ERTVTFYVM LVMLWGSIC LGLLPWGMW CLRDESTCSV VRPLTKNAA ILSVSFLEMF AIMQLYIQI CKIVMRHAHQ IALQHHFLAT</p>	Homo sapiens

248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAILCTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSINPVI YAFRNOEIQK ALCLICGCI PSSIAQRARS PSDV ggggcagatc cagattccct ttgcagtcca cgccaggcct tcaccatgga. tcagttccct A gaatcagtga cagaaaaactt tgagtacgat gattggctg aggcctgtta tattggggac atcggtgctt ttgggactgt gtccctgtcc atattctact cgtctactt tgccattggc ctgggtggaa atttgggtt agtgtttgct ctacccaaca gcaagaagcc caagagtgtc accgacattt acctcctgaa cctggccttg tctgatctgc tgttttagc cactttgccc ttctggactc actatttgat aaatgaaaag ggcctccaca atgccatgtg caaatccact accgctttct tottctatgg ctttttttga agcatattct tcatcaccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aactccatga caacccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tggggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc cttgtgact acccaggtt ccttcaggaa atctggcccg tgcctcgcaa ttgtgaaaca aattttcttg gcttccact cccctgtctc attatgagtt attgctactt cagaatcctc cagagcgtgt tttctcgcaa gaaccacaa aaagccaaaag ccattaaact gatcctctcgt gtgtcctcgt tgttttctc cttctggaca ccctacaacg ttatgatattt cctggagacg cttaagctct atgacttctt tccagttgt gacatgagga aggatctgag gctggccctc agtggactg agacggttgc attagccat tgttgctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg ggaatgcctt ggcgttcctg ttggggcgtc cagtcacgt tgatttctc tcactcgaat cacaaggag cagcctatga agtgttctga gcagcaattt tacttaccac acgagtgtg gagatgcatt gctcctctc tgaagggaat cccaaagcct tgttctaca gagaacctgg agttcctgaa cctgatgctg actagtgagg aagatttttg ttgttattc ttacaggcac aaatgatgg acccaatgca cacaaacaa cctagagtg ttgttgagaa ttgtgtcaa aatttgaaga atgaacaaat tgaactcttt gaatgacaaa gtagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaa attcaactca gactagtta gtaaatgag ggtgtggaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg agggaaacca ggcctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDIAEA CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNK P KPKSVTDIYL LNLALSDLIF VATLPFWTHY LINEKGIHNA MCKFTTAFEF IGFFGSIFFI TVISIDRYLA IVLAANSNN RTVQHVTIS LGWMAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFI LGF LPLIMSYC YFRIQTLES CNHKKAKAI KLILLVIVF FLWTPYNNM IFLETIKLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLXHLXGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NFTYHTSDGD ALILL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctc tacactctg tcttctctc agtctttac acagctgtgt tctgactgg agtgtgggg aacctgttc tcatgggagc gttgcattc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc cctcgacttc atttttcttg tccattgccc tctctgggtg gataaagaag catctctagg actgtggagg acgggctctc tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcaatgcagt gtcctcctgc tcaattgcat gagtttgac cgtactctg ccattgtgtg gccagtcgta tcagagaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttcatc	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	gtgtctgagc cctcaaatg agggaaacca ggcctgagc caagcta MDQFPESVTE NFEYDDIAEA CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNK P KPKSVTDIYL LNLALSDLIF VATLPFWTHY LINEKGIHNA MCKFTTAFEF IGFFGSIFFI TVISIDRYLA IVLAANSNN RTVQHVTIS LGWMAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFI LGF LPLIMSYC YFRIQTLES CNHKKAKAI KLILLVIVF FLWTPYNNM IFLETIKLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLXHLXGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NFTYHTSDGD ALILL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctc tacactctg tcttctctc agtctttac acagctgtgt tctgactgg agtgtgggg aacctgttc tcatgggagc gttgcattc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc cctcgacttc atttttcttg tccattgccc tctctgggtg gataaagaag catctctagg actgtggagg acgggctctc tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcaatgcagt gtcctcctgc tcaattgcat gagtttgac cgtactctg ccattgtgtg gccagtcgta tcagagaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttcatc	Homo sapiens
250	3853	G Protein-Coupled Receptor GPR15	NM_005290	atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcaggg agaccactc ccatgttctc tacactctg tcttctctc agtctttac acagctgtgt tctgactgg agtgtgggg aacctgttc tcatgggagc gttgcattc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc cctcgacttc atttttcttg tccattgccc tctctgggtg gataaagaag catctctagg actgtggagg acgggctctc tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcaatgcagt gtcctcctgc tcaattgcat gagtttgac cgtactctg ccattgtgtg gccagtcgta tcagagaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttcatc	Homo sapiens

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251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSIVL KPGSRRLIDI VLLITCMSVD PYCAEKKATP KIIFIWVAAF IYYIFDSYIR	DYYVATSPNS FIINLAASDF RYLAIWVPW IKLIWSIVAL LVSWLPENTF RAIVHCLCPC	DIRETHSHVP IFLVTLPLMW SRKFRRTDCA ITFFVPELLS KFLAIVSGLR LKNYDFGSST	YTSVFLPVFY DKEASLGLWR YVVCASIWFI IVTCYCCIAR QEHYLPSSAIL ETSDSHLTKA	TAVFLTGVLG TGSFLCKGSS SCLLGLPTLL KLCAHYQQSG QLGMEVSGPL LSTFIHAEDF	NLVLGALHF YMISVNMHCS SRELLTIDDK KHKKLKXSI AFANSCVNPF ARRRKRVSLS	P
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaaacta acactgtttc agtgggaagt agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtactttctgc tcttgccctt acttaaaaa caggaccacc ctgactcaag actgacattt tcataatctc aaggatcatc tttcgctctc caccttccct acaatttcag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	aaagagcaat cttttttaag cagaagagc ctgaaaaatg ctaccaacaa agctcacatc attggattat accaggtaa ttacccttcc cagattcttg attagtctg acgtgcaag cctctgctac attctgaca ttttcttga cttcaggca atcacgctgc ctgatgctgg atgaacctca gctcgagtca ttccgatctg aggttctttc tattctgtat tttaaaaaa	taaagtgc aaagcaaa tatttaaca ctcatctctc gctgtaaaat cagatgaata ttgttaacat ccatctatat gatgaatgtg ttatgcaaaa agtgctttac ggccattgta ccgtgtggc tgctctataa agaccagat aaaagctgtg catcatgatt ttcctttgtt ggaagtctaa gctgaacctc gctcgctgc gaacgtttac gaaacgggga gcacgtgtct ttagtgctat gtagtctacg gtcactaacg catcaaatcc agtcocctttt aaaaaaaaa	tcacggagc tatgttccct aatgactatc ttgttaccac gcatagtggt gatgaatggc ccaagcattg cagccgaagt gtctggataa aaagactcca aacgtgctga gggtgctact aaagtcaag aaagtcaag tttatgacct aatccctggg cctactaca cctactacgt aattaccttc aatataaaca cacttcaact cctctgaaaa aataaattca			

253	3854	G Protein- Coupled Receptor GPR18	NP_005283.1	MITLNNQDQP VPENSSHPDE YKIAALVYS CIFTGLFVN ITALWVESCT TKKRITVTIY P MMNVALVDLI FIMTLPRMF YVAKDEWPFQ EYFQILGAL TVFVPSIALW LLAFISADRY MAIVQPKYAK ELKNTCKAVL ACVGVWIMTL TTTTPLLILLY KDPDKDSTPA TCLKISDIIY LKAVNVNLIT RLAFFFLIPL FIMIGCYLVI IHNLLHGRIS KLKPKVKEKS IRIIITLLVQ VLVCEWPFHI CFAFLMLGTG ENSYNPWGAF TTFLLMNLSTC LDVILYIYS KQFQARVISV MLYRNYLRSM RRSFRSGSL RLSLNINSEM L	Homo sapiens
254	3855	G Protein- Coupled Receptor GPR19	NM_006143	aattaagaga aaaaagtga atattggttt tgctcacaga atggataaca gaaagccaca A tttgattatt cctacacttc tgggtgcccc ccaaaacgc agtcgactg aaacagccac acctctgcca agccaatacc tgatggaatt aagtggaggag cacagtggga tgagcaacca aacagacctt cactatgtgc tgaaaacccgg ggaagtggcc acagccagca tcttcttggg gattctgtgg ttgttttcta tctctggcaa tctcctgggt tgttgggtga tccataggag tagggaggact cagtcctacca ccaactactt tgggtgtccc atggcatgtg ctgaccttct cctcagcgtt gccagcagc ctttcgtcct gctcagttc accactggaa ggtggacgct gggtagtga acgtgcaagg ttgtgcgata ttbcaatat ctcactccag gtgtccagat ctacgttctc cttcctactt ccatagaccg gttctacacc atgctctatc cctcagacct caaggtgtcc agagaaaaag ccaagaaaat gattgcggca tctgtgatct ttgatgcagg ctttgtgacc cctgtgctct ttttctatgg ctccaactgg gacagtcatt gtaactattt cctccctcc tcttgggaag gcactgccta cactctatc cactcttgg tgggtttgt gattccatct gctctcataa ttttatttta ccaaaaggtc ataaatata tttggagaat aggcacagat ggcgaacgg tgagggaggac aatgaacatt gtcctcggga caaaagtga aactatcaag atgttctcta ttttaaatct gttgtttttg ctcctcggc tgccttttca tgtagctcag ctatggcaac ccaatgaaca agactataag aaaagttccc ttgttttca agctatcaca tggatatcct ttagtcttc agcctctaaa cctactctgt attcaattta taatggcaat ttctggagag ggaatgaaga gactttttgc atgtcctcta tgaatgtta ccgaagcaat gctctacta tcaacaacag ttcaggatg gccaaaaaa actacgtgg catttcagaa atcccttcca tggccaaaac tattaccaaa gactcgatct atgactcatt tgacagagaa gccaggaaa aaaagcttgc ttggccatt aactcaaat caccataac ttttgtctaa gttctcattc ttccaattgt tatgaccag agattaataa gctttaacta taaaaacaga agctatttac atattgttt tcaactcaact ttccaaggga aatgttttat tttgtaaat gcattcattt gttactgt	Homo sapiens
255	3855	G Protein- Coupled Receptor GPR19	NP_006134.1	MVFAHRMDS KPHLIIPIL VPLQNRSCTE TATPLPSQYL MELSEHSWM SNQTDLHVYL P KPEVATASI FFGILWLFSL FGNSLVCLVI HRSRTQSTT NYFVSMACA DLLISVASTP FVLLQFTGR WTLGSATCKV VRYFQYLTGP VQIYVLLSIC IDRFYTIYYP LSEKVSREKA KKMIAASWIF DAGFVTPVLF FYGSNWDSC NYFLPSSWEG TAYTVHFLV GFVIPSVLII LFYQKVIKYI WRIGTDGRV RRTMNIIVPT KVKTKMFLI INLLFLLSWL PFHVAQLWHP HEQDYKKSSL VETAITWISF SSSASKPTLY SIYANFRRG MKETFCMSSM KCYRSNAYTI TSSRMAKN YVGEISEIPSM AKTITKDSIY DSFDREAKEK KLAWPINSNP PNTFV agagatgggg acggaggcca cagagcaggt tctctggggc catiaactct gggatgaaga A ggacgcatac tgggtgagc cactgcccga gctttgtctac aagccgatg tccaggcctt cagccgggcc ttccaacca gtgtctcctt gaccgtggct gcgctgggtc tggccggcaa tggcctggtc ctggccacc accctggcagc ccgacgcgca gcgctgtcgc ccacctctgc	Homo sapiens
256	3856	G Protein- Coupled Receptor GPR2/CCR10	NM_016602		Homo sapiens

257	3856	G Protein-Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgtc cagctggccc tggcggacct cttgctggcc ctgactctgc ccttgcgggc agcaggggct cttcagggtt ggaagtctgg aagtgcaccc tgcgcacca tctctggcct ctactggcc tcttccacg ccggttctct cttctggcc tgtatagcg ccgaccgcta cgtggccatc ggcgagagc tccagccgg ccgagggccc tccactccc gccgcgaca cttggtccc gtcactgtgt gctgctgtc actgctctg ccgctgctg cctgtctatt cagccaggat ggcagcggg aagcccaacg acgctgtcgc ctcactctcc ccgagggctt cagcagacg gtgaaggggg cgaagccgtt ggcgagggtt gccctgggct tgcgctgccc gctggcgctc atgttagcct gctacgcgtt tctggcgcc agctgctgg ccgccaaggg gcccgagcgc cggcgtgcgc tgcggtgctt ggtgctctg gtggcgctt tagtgtgtct gcagtgccc tacagcctcg cctgtctgct gatactgccc gatctactgg ctgcgcgga gcggagctgc cctgccagca aacgaaaga tctgcactg ctggtgacca ggggcttggc cctgcgccgc tctggcctca atccgttct ctacgcttc ctggcctgc gattccgcca ggaactggg agctgtctac ggggtgggag ctgcctcca gggcctaac ccgcgcggg ctgccccgc cggccccgc ttcttctctg ctacgtccc acggagacc acagtcttc ctgggacaac tagggctgcg aactagagg agggggcagg ctgagggtcg tgggaaaggg gagttagtgg ggaacactg agaaagagg agggacttaa agggactacc tctgtgctt gccacattaa attgataaca tggaaatgaa aaaaaaaaaaaaa</p>	Homo sapiens
258	3857	G Protein-Coupled Receptor GPR20	NM_005293	<p>atgcctctg tgtctccagc ggggcccctcg gccggggcag tcccaatgc caccagtg acaacagtgc ggaaccaatgc cagcgggctg gagggtgccc tgttccact gtttgcggg ctggacgagg agctgcatgg cacttccca gccctgtcg tggcgtgat ggcgggtgac ggagccatct tcttggcagg gctggtgctc aacgggctgg cgtgtactt cttctgctc cgcacccggg ccaagacacc ctacgtcatc tacacatca acctggtgtt gaccgatca ctggtagggc tgtccctgcc cagcgccttc gctgtgtact acggcgccag gggctgctg cgctgtgctt tcccgacgt cctcggttac ttctcaaca tgcactgctc cactcttcc ctcacctgca tctgctgga ccgtacctg gccatgctg gccccaagc tcccgcgcc tgcgcacgc ctgctctgc cagggccgtg tgcgcttcg tgtgcttgc ccgctgtgc gtcacctgt cgtgtctgg cgtgacagg agccggccct gctgcgtgt ctttgcgtg actgtccctg agtctctgct gccctgctg gtcatcagc tgtttaccg ccgcatcatg tgtgactgt cggggccgg tctgtccac cagggtgccc agcgcgctt gggggccatg cagctcctgc tcaaggtgt cactatctt cctgtctgct tcaagccctt ccagccccg caagtggccg tggcgctgt gccgacatg ccacacaca cgaagcctgt ggtctaacac gtggccgtga cctcagcag cctcaacagc tgcattggacc ccatcgctca ctgcttctc accagtggct tccaggccac cgtccgaggc ctcttggcc agcacggaga gcgtgagccc agcagcgggt acgtggtcag catgcacagg agctccaagg gctcagggtg tcatcacatc</p>	Homo sapiens

259	3857	G Protein- Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcacgc cctcacccag gccctggcta atgggcccga ggcttag GAIFLAGLV NGLALHYFCC RFRKTPSVI YTNLVVTDL LVGLSLPTRE AVYRGAGCL RCAFFHVIGY FLNMHCSILF LTCICVDYLI AIVRPEAPAA CRQPACARAG CAFWILAAGA VTLSVLGVTG SRPCCRFFAL TVLEFLPIL VISVFTGRIM CALSRPGLLH QGRQRRVRAM QLLLTVLIIF IVCFTPFHAR QVAVALWPDH PHHTSLVVH VAVTLSSLNS CMDPIVYCFV TSGFOATVRG LEGQHGEREP SSGDVSMHR SSKSGRHHI LSAGPHALTO ALANGPEA atgaactcca ccttgatgg taatcacagc agccaccctt ttgctctctt ggcattggc A tatttgaaa ctgtcaattt ttgctttttg gaagtattga ttattgtctt tctaaactgta ttgattattt ctggcaacat cattgtgatt ttgtatttc actgacac tttgttgaac catcaccta caagtattt tatccagatc atggcatatg ctgacctttt tggtaggggtg agctgggtgg tccctctctt atcactcttc catcacccc ttccagtaga ggagtctttg actggccaga tattgggtt tttagtatca gttctgaaga cgtctccat ggctctctg gcctgtatca gcattgatag atacattggc attactaac ctttaacctg taatactctg gttacacct ggagactacg cctgtgtatt ttctgtatt ggctatactc gacctgggtc ttcctgcctt cctttttcca ctgggggcaaa cctggatatac atggagatgt gttcagtggtg tgtggcaggt cctggcacac cgaactctac ttaccctgt tcatcgtgat gatgttat gcccagcag cctttattgt ctgcttcacc tatttccgat ctgccaacag cacacaagg atatcagcga aaggcaagc cgttcagca gccagagtg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttcgaat cactagtgtg ttttacatcc tctgggtggc atataatc tactcttgg tggaaagctc cactggccac agcaaccgt tgcatacct cttgaccacc tggcttgcta ttagtaacag tttctgcaac tgtgtaatt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttcttggc aagtcagact acagcaacg acccttacac agttagaagc aaaggccctc ttaaggatg tcatatctga HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLEVESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTNTL VTPWRLRLCI FLIWLSTLV FLPSFHWGK PGYHGDVFWQ CAESWHTDSY FTLFVNMVLY APAALIVCFT YFNIFRICQQ HTKDISEROA RFSSQSGETG EVOACPDKRY AMVLEFRTSV FYIWLPIYII YFLESSTGH SNRFASFLT WLAINSFEN CVIYSLNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgttttt cctccattct ggaatacaac atgcagctg aatcaacat tacagtgcga A gatgacattg atgacatcaa caacaatag tacaaccac tatcatatcc gttaaactt caagtctc tcaccggatt tcttatgtta gaaattgtg ttggacttgg cagcaacctc actgtattgg tactttact catgaaatcc aactaatca actctgcag taacattatt acaatgaatc ttcatgtact tgaatgaata attgtgtgg gatgtatcc tctaaactata gttatecttc tgccttcaat ggagagtaac actgctcga ttgtgtgtt ccatgaggt tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgtatcac ttiggacaga tatgacatct ctgtaaaacc tgcaaacga attctgacaa tgggcagagc tgtaattgta atgatatcca ttggatttt ttctttttc tcttctctga ttcttttat tgaggtaaat	Homo sapiens
260	3858	G Protein- Coupled Receptor GPR21	NM_005294	atgaactcca ccttgatgg taatcacagc agccaccctt ttgctctctt ggcattggc A tatttgaaa ctgtcaattt ttgctttttg gaagtattga ttattgtctt tctaaactgta ttgattattt ctggcaacat cattgtgatt ttgtatttc actgacac tttgttgaac catcaccta caagtattt tatccagatc atggcatatg ctgacctttt tggtaggggtg agctgggtgg tccctctctt atcactcttc catcacccc ttccagtaga ggagtctttg actggccaga tattgggtt tttagtatca gttctgaaga cgtctccat ggctctctg gcctgtatca gcattgatag atacattggc attactaac ctttaacctg taatactctg gttacacct ggagactacg cctgtgtatt ttctgtatt ggctatactc gacctgggtc ttcctgcctt cctttttcca ctgggggcaaa cctggatatac atggagatgt gttcagtggtg tgtggcaggt cctggcacac cgaactctac ttaccctgt tcatcgtgat gatgttat gcccagcag cctttattgt ctgcttcacc tatttccgat ctgccaacag cacacaagg atatcagcga aaggcaagc cgttcagca gccagagtg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttcgaat cactagtgtg ttttacatcc tctgggtggc atataatc tactcttgg tggaaagctc cactggccac agcaaccgt tgcatacct cttgaccacc tggcttgcta ttagtaacag tttctgcaac tgtgtaatt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttcttggc aagtcagact acagcaacg acccttacac agttagaagc aaaggccctc ttaaggatg tcatatctga HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLEVESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTNTL VTPWRLRLCI FLIWLSTLV FLPSFHWGK PGYHGDVFWQ CAESWHTDSY FTLFVNMVLY APAALIVCFT YFNIFRICQQ HTKDISEROA RFSSQSGETG EVOACPDKRY AMVLEFRTSV FYIWLPIYII YFLESSTGH SNRFASFLT WLAINSFEN CVIYSLNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgttttt cctccattct ggaatacaac atgcagctg aatcaacat tacagtgcga A gatgacattg atgacatcaa caacaatag tacaaccac tatcatatcc gttaaactt caagtctc tcaccggatt tcttatgtta gaaattgtg ttggacttgg cagcaacctc actgtattgg tactttact catgaaatcc aactaatca actctgcag taacattatt acaatgaatc ttcatgtact tgaatgaata attgtgtgg gatgtatcc tctaaactata gttatecttc tgccttcaat ggagagtaac actgctcga ttgtgtgtt ccatgaggt tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgtatcac ttiggacaga tatgacatct ctgtaaaacc tgcaaacga attctgacaa tgggcagagc tgtaattgta atgatatcca ttggatttt ttctttttc tcttctctga ttcttttat tgaggtaaat	Homo sapiens
261	3858	G Protein- Coupled Receptor GPR21	NP_005285.1	atgaactcca ccttgatgg taatcacagc agccaccctt ttgctctctt ggcattggc A tatttgaaa ctgtcaattt ttgctttttg gaagtattga ttattgtctt tctaaactgta ttgattattt ctggcaacat cattgtgatt ttgtatttc actgacac tttgttgaac catcaccta caagtattt tatccagatc atggcatatg ctgacctttt tggtaggggtg agctgggtgg tccctctctt atcactcttc catcacccc ttccagtaga ggagtctttg actggccaga tattgggtt tttagtatca gttctgaaga cgtctccat ggctctctg gcctgtatca gcattgatag atacattggc attactaac ctttaacctg taatactctg gttacacct ggagactacg cctgtgtatt ttctgtatt ggctatactc gacctgggtc ttcctgcctt cctttttcca ctgggggcaaa cctggatatac atggagatgt gttcagtggtg tgtggcaggt cctggcacac cgaactctac ttaccctgt tcatcgtgat gatgttat gcccagcag cctttattgt ctgcttcacc tatttccgat ctgccaacag cacacaagg atatcagcga aaggcaagc cgttcagca gccagagtg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttcgaat cactagtgtg ttttacatcc tctgggtggc atataatc tactcttgg tggaaagctc cactggccac agcaaccgt tgcatacct cttgaccacc tggcttgcta ttagtaacag tttctgcaac tgtgtaatt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttcttggc aagtcagact acagcaacg acccttacac agttagaagc aaaggccctc ttaaggatg tcatatctga HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLEVESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTNTL VTPWRLRLCI FLIWLSTLV FLPSFHWGK PGYHGDVFWQ CAESWHTDSY FTLFVNMVLY APAALIVCFT YFNIFRICQQ HTKDISEROA RFSSQSGETG EVOACPDKRY AMVLEFRTSV FYIWLPIYII YFLESSTGH SNRFASFLT WLAINSFEN CVIYSLNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgttttt cctccattct ggaatacaac atgcagctg aatcaacat tacagtgcga A gatgacattg atgacatcaa caacaatag tacaaccac tatcatatcc gttaaactt caagtctc tcaccggatt tcttatgtta gaaattgtg ttggacttgg cagcaacctc actgtattgg tactttact catgaaatcc aactaatca actctgcag taacattatt acaatgaatc ttcatgtact tgaatgaata attgtgtgg gatgtatcc tctaaactata gttatecttc tgccttcaat ggagagtaac actgctcga ttgtgtgtt ccatgaggt tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgtatcac ttiggacaga tatgacatct ctgtaaaacc tgcaaacga attctgacaa tgggcagagc tgtaattgta atgatatcca ttggatttt ttctttttc tcttctctga ttcttttat tgaggtaaat	Homo sapiens
262	3859	G Protein- Coupled Receptor GPR22	NM_005295	atgaactcca ccttgatgg taatcacagc agccaccctt ttgctctctt ggcattggc A tatttgaaa ctgtcaattt ttgctttttg gaagtattga ttattgtctt tctaaactgta ttgattattt ctggcaacat cattgtgatt ttgtatttc actgacac tttgttgaac catcaccta caagtattt tatccagatc atggcatatg ctgacctttt tggtaggggtg agctgggtgg tccctctctt atcactcttc catcacccc ttccagtaga ggagtctttg actggccaga tattgggtt tttagtatca gttctgaaga cgtctccat ggctctctg gcctgtatca gcattgatag atacattggc attactaac ctttaacctg taatactctg gttacacct ggagactacg cctgtgtatt ttctgtatt ggctatactc gacctgggtc ttcctgcctt cctttttcca ctgggggcaaa cctggatatac atggagatgt gttcagtggtg tgtggcaggt cctggcacac cgaactctac ttaccctgt tcatcgtgat gatgttat gcccagcag cctttattgt ctgcttcacc tatttccgat ctgccaacag cacacaagg atatcagcga aaggcaagc cgttcagca gccagagtg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttcgaat cactagtgtg ttttacatcc tctgggtggc atataatc tactcttgg tggaaagctc cactggccac agcaaccgt tgcatacct cttgaccacc tggcttgcta ttagtaacag tttctgcaac tgtgtaatt atagtcttc caacagtgt ttccaaagag gactaaagc cctctcaggg gctatgtga cttcttggc aagtcagact acagcaacg acccttacac agttagaagc aaaggccctc ttaaggatg tcatatctga HHTTSYFIQT MAYADLFVGV SCVPSLSLL HHPLEVESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTNTL VTPWRLRLCI FLIWLSTLV FLPSFHWGK PGYHGDVFWQ CAESWHTDSY FTLFVNMVLY APAALIVCFT YFNIFRICQQ HTKDISEROA RFSSQSGETG EVOACPDKRY AMVLEFRTSV FYIWLPIYII YFLESSTGH SNRFASFLT WLAINSFEN CVIYSLNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgttttt cctccattct ggaatacaac atgcagctg aatcaacat tacagtgcga A gatgacattg atgacatcaa caacaatag tacaaccac tatcatatcc gttaaactt caagtctc tcaccggatt tcttatgtta gaaattgtg ttggacttgg cagcaacctc actgtattgg tactttact catgaaatcc aactaatca actctgcag taacattatt acaatgaatc ttcatgtact tgaatgaata attgtgtgg gatgtatcc tctaaactata gttatecttc tgccttcaat ggagagtaac actgctcga ttgtgtgtt ccatgaggt tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgtatcac ttiggacaga tatgacatct ctgtaaaacc tgcaaacga attctgacaa tgggcagagc tgtaattgta atgatatcca ttggatttt ttctttttc tcttctctga ttcttttat tgaggtaaat	Homo sapiens

263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297
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<p>atgttgtgtc cttcaagac agatggtcga gggcactctg gtaggattca ccagaaaact A catggagaag ggaagaaggga caagattagc aacagtgaag ggaaggagaa tgggtgggaga ggattccaga tgaacgggtgg gtcgtggag gctgagcatg ccagcaggat gtcagttctc agagcaaac ccatgtcaaa cagccaacgc ttgtctcttc tgtccccagg atcacctcct cgacgggga gcattctcta catcaacatc atcatgctt cgggtgttgg caccatctgc ctcctgggca tcatcgggaa ctcacaggtc atcttcggg tctggaagaa gtccaagctg cactgggtgca acaagtcctc cgacatcttc atcatcaacc tctcggtagt agatctctc ttctctctgg gcattgcccct catgatccac cagctcatgg gcaatggggt gtggcacttt ggggagacca tgtgcacct catcacggcc atggatgcca atagttagtt caccagcacc tacatcctga ccgcatggc cattgaccgc tacctggcca ctgtccacc catctcttc acgaagtcc ggaagccctc tgtggccacc ctgggtgatct gctcctgtg ggcctctcc ttcatcagca tcacctctgt gtgctgtgat gccagactca tcccttccc aggaggtgca gtgggtgctg gcatacgctt gcccaaccca gacactgacc tctactggtt cactctgtac cagtttttcc tggcctttgc cctgctttt ttggtcatca cagccgcata cgtgaggtac ctgcagcgca tgactcctc agtggccccc gctccacgc gcatcctg gctcgggaca aagagggtga ccgcacagc catgcccac tgtctggtct tctttgtgtg ctgggcaccc tactatgtgc tacagctgac ccagttgttc atcagccgcc cgacctcac ctttgtctac ttatacaatg cggccatcag cttgggctat gccaacagct gctcaacc ctttgtgtac atcgtgctct gtgagacgtt ccgcaaacgc ttgggtcctgt cgtggaagcc tgcagcccg ggcagcttc gcgtgtcag caacgtctcag acggtgacg aggagaggac agaaagcaaa</p>				<p>Homo sapiens Homo sapiens</p>			

[illegible]

269	3862	G Protein- Coupled Receptor GPR3	NP_005272.1	<p>gacctcaact actattcaga gacaacagtg acacggacct atgtgatgct ggccttagtg tggggagggtg ccttgggcct ggggtgctg cctgtgctg cctggaactg cctggatggc ctgaccacat gtggcggtgtg ttaccactc tccagaacc atctgttagt totggceatt gcctttctca tgggtgttgg cctcatgtg cagctctacg cccaaatctg ccgcatcgtc tgccgcatg cccagcagat tgccttcag cggcactgc tgcctgcctc ccactatgtg gccaccgca agggcattg cacactggc gtgggtctg gagcctttgc ccctgtgtg ttgcccctca ctgtctactg cctgtgggt gatgccact cccacactct ctacacactat cttaccctgc tccctgccac ctacaactcc atgataacc ctatcatcta cgccttcgc aaccaggatg tgcagaaagt gctgtgggt gctgtgctg gctgttctc ttccaagatc cccttcgat ccgctccc cagtgtgctc tag</p> <p>MMWGAGSPLA WLSAGSGNVN VSSVGPAGP TGPAPLPSP KAMDVVLCS GTLVSCENAL P VVAIIIVTPA FRAPMELIVG SLAVADLLAG LGLVHFAV FCIGSAEMSL VIVGVIAAF TASIGSLIAI TVDRYLSLVN ALTYSETTV TRTYVMLALV WGGALGLGLL PVLAWNCLDG LITCGVYVPL SKNLVVLAI AFFMVEGIML QLYAQICRIV CRHAQQIALQ RHLPPASHYV ATRKGIATIA VVLGAFAACW LPFTVYCLLG DAHSPPLYTY LTLPLATYNS MINPIIYAFR NQDVQKVLWA VCCCCSSSKI PFRSRSPSDV</p>	Homo sapiens
270	3863	G Protein- Coupled Receptor GPR31	NM_005299	<p>atgccattcc caaactgctc agccccagc actgtgtgtg ccacagctgt ggtgtgtctg A ctgggggctgg agtgtgggt ggtgtgctg ggcaacggtg tggcgctgtg gaccttctg ttccgggtca ggggtgtgaa gccgtacgt gctacactgc tcaacctggc cctggctgac ctgtgtgtg gctgtgctc gcttctctg gcgcctctt cactgagcct ccaggcttg catctgggc gttgtggctg ctgggcccgt gcttctctg tggacctcag ccgacgctg gggatggct tccgtggcgc cgtggcttg gaccgtacc tccgtgtgtt ccacctcgtg cttaaggtea acctgctgc tctcaggcg gccctggggg tctgggctt cgtgtgctc ctgatggctg cctcacctg cccgggctg ctctctctg agccgccca gaactccacc aggtgccaca gtttctact cagggcagac ggctcctca gcatcatctg gcaggaagca ctctcctgoc tcaagttgt cctcccttt ggcctcactg tgtctgcaa tgcaggcatc atcagggtc tccagaaaag actccggag cctgagaac agcccaagt tccaggggcc caggcactgg tcaacttgg ggtgtgtg tttgctctg gctttctgct ctgttctctg gccagagtcc tgatgcacat ctccagaat ctggggagct gcaggggcct ttgtgcagt gtccatact cggatgtcac gggcagcctc acctacctg acagtgtgt caacctcgtg gtatactgt tctccagccc cacttcagg agctcctatc ggagggtctt ccacacctc cgaggcaag ggcaggcagc agagccccc gatttcaacc ccagagactc ctattcctga MPFNCSPS TVATAVGVV LGLECGLL GNAVALWTFV FRVRWKPVA VYLNIALAD P LLIAACLPL AFYLSLQAW HLGRVGCWAL RFLDLRSV GWFLAAVAL DRYLRVHPR LKVNLSPQA ALGVSLVWL LMVALTCPGL LISEAAQNST RCHSFYSRAD GSFIIWQEA LSCIQFVLPF GLIVFCNAGI IRALQKRLRE PEKQKQORA QALVTLVVL FALCLPCFL ARVLMHIFQN LGSRCALCAV AHTSDVTGSL TYLHSVNPV VYCFSSPTR SSYRRVFHTL RGKQAAEPP DFNPRDSYS</p>	Homo sapiens
272	3864	G Protein- Coupled Receptor	NM_005282	<p>ctgtgacct tactatctc tgtgtcttc tggggctcta ggaatgcca gcactcccac A ccacattgcc tgaacttcc aacactcctt agctgcgtg tgcctatct caacacttcc tcatgtattt cttgtgtct ctagaacatt ccccgccat tattacttca atatggctac</p>	Homo sapiens

GPR4

acataacttc taattgcct gaaaccatc tcttctcâc cattgccag cgatgtttc
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ggtctttc tgcataccac agtccactg ctttccac cctcaactgt gtggcgacc
ccatctctâ ctgctgtc aacgaggc cccgacga tgtggcâag gccctgcâc
acctgctcc ctttctggc agcacaag ccacgagat gccaatgcc tgcctcacc
tggagaccc atcaccctc aagaggaâc gcacagcâc agcatgact ggcagctgg
cggcaccct ggcctccag ggggaccag tgcagctga gatctgccc cagacaat
gaacccag tggcacagaa tcccagtt tccctctcâ tccacagtc cctctctcc
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gaacttagga agatgaggt tgtgtgtcâ ctggtcâcc tttgtgtcc cagatccat
cacagtctg cagtgtgga ggcctctctg agggaggaga tgaataata tatctttg
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cagctccac ctctgggt ctcacagct ctccacat cagctccc agtagctgg
accacaatg tgaagccc accatctggc taattttgt acttttga taaatggagt
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gcctccââ gtgtcagat tagatgtg agccccatg tctggccaga taaatâagt
câacattg gttccagaa aataagacâ aatagaga gttagattt ttttttccâ
âcagtgat aâagtctgt gactcgggg aagtggaag gâgaatgca gccgatâg
agtcatatg ttgcaâag cctgtgtcâc acagccag gâcâtaaga ccgcaatct
aagttctag aâaacagc atctcâagt caagctgag gatgaagag gâgaatgca
gaactcagt gaaggcaat cagggcagac tgcctggag agtgatgcca gaagggttg
gaagaaggt tgggacâga agaagggtâ ttatctat cattcâcag aggttatgt
agggcactgt gctgggtgg gctggggâcâ cacaatgac tgaggcagcc tggccttgcc

273	3864	G Protein- Coupled Receptor GPR4	NP_005273.1	ttcacaggcg tcaccatata caagtaata aaaaatattg aatgtttgga attgct MGNHTWEGCH VDSRVDHLFP PSLYIFVIGV GLPTNCIALW AAYRQVQORN ELGVYLMNLS P IADLLYICITL PLWVDYFLHH DNWIHFGSG KLFGEFTYTN IYISIAFLCC ISVDRYLAVA HPIRFARLRL VKTAVAVSSV VWATELGANS APLEHDELEF DRYNHTFCFE KPFMEGWVWV NNLYRVFVGF LFPWALMLLS YRGILRAVRG SVSTERQEKA KIKRLALSLL AIIVLCFAPY HVLILLSRAI YLGRFPWDCG EERVSAYHS SLAFTSINCV ADPILYCIWN EGARSDDAKA LHNLRLRLAS DKPQEMANAS LTLEPPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein- Coupled Receptor GPR6	NM_005284	atgaacggga ggcgcgcctc gctcaacgac tcccaggtgg tggtagtgcc ggccgaaggga A ggcgcgggcg cgccacagc agcagggggg ccggacacgg gcgaatgggg accccctgct ggcgcggtct taggagcgg cgcgagagct aatgggtctc tggagctgtc ctgcagctg tgggtggcg caccgggact cctgctgcca gcggtgaate cgtgggacgt gctcctgtgc gtgtcgggga cagtgtgcg cttgagaaac gcgctggtgg tggcgctcat cgcgtccact ccggcgctgc gcacgcccatt gttcgtgctg ttaggaagcc tggccacgcg tgacctgtg gggggtgtg gctcatctt gcactttgtg ttccagtact tggtgccctc ggagactgtg agtctgctea cgttgggctt cctcgtggcc tccctgcgcg cctcgtgcag cagcctgtctg gccattacgg tggaccgcta cctgtccctg tataacgcg tcacctatta ctgcgcggcg accctgttgg gctgtcacct cctgtctgccc gccacttggg cgtgtccctc aggcctgggg ctgctggccc tctgtggctg gaactgcctg gcagagcgcg ccgcccgcag cgtggtggcg ccgctggcgc gaacacagt ggtctgtctc tccgcgcctc tcttcagtgt cttcggcact atcgtgacc tgtacgtgcg catctgccag gtggtctggc gccacggcca ccagatcgcg ctgcagcgc actgctgccc gccaccccat ctgctgcca ccagaaagg tgtgggtaca ctggctgtgg tctggggcac tttcggcgcc agctggctgc ccttcgcat ctattgctg gtgggcagcc atgaggaccc ggcggtctac acttacgcca cctgctgccc cgcacccatc aactccatga tcaatcccat catctatgcc ttccgcaacc aggagatcca gcggcgccctg tggctcctgc tctgtggctg tttccagtc aaagtgcctc ttcgttccag gtctccacg gaggtctga	Homo sapiens
275	3866	G Protein- Coupled Receptor GPR6	NP_005275.1	MNASASLND SQVVVAEG AAAATAAGG PDTGEWGPPA AALGAGGGA NGSLSSQL P SAGPGLLP ANPNDVLLC VSGTVIAGEN ALVVALIAT PALRTPMFVL VGLATADLL AGCGLIHV FQYLPSETV SLLTVGELVA SFAASVSLI AITVDYLSL YNALTYSRR TLIGVHLLA ATWVSLGLG LLPVLGNCL AERAACSVR PLARSHVALL SAFFMVFGE MLHLYVRICQ VWRHAHQIA LQHQCLAPPH LAATRKGVT LAVVLGTFGA SWLFFAIYCV VGSHPDPAV TYATLLPATY NSMINPIYA FRNQEIQAL WLLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein- Coupled Receptor GPR7	NM_005285	atggacaacg cctcgttctc ggagccttgc ccgcaccaag catcgggccc ggaccggcg A ctgagctgct ccaacgcgtc gactctggcg ccgctggcg ccgctgtgta ccagttgtct acgctgtgat ctgcgcctg ggtctggcg gcaactcgc cgtgctgtac gtgtgtctgc gggcgccccg catgaagacc gtcaccaacc tgttcacat caactggcg atcgccgacg agctcttca cgtgtgtctg ccatcaaca tcgccgacit cctgctgcg cagtgggcct tcggggagct catgtgcaag ctcatcggtg ctatcgacca gtacaacac	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	<p>ctgataaatt ggcggcgcc agcctga MDNASFSEPW PANASGPDPA LSCSNASTLA PLPAPLAVAV PVYAVICAV GLAGNSAVLY P VILRAPRMKT VTNLIILNLA IADELFTLVL PINIADFLR QWFFGELMCK LIVAIQYNT FSSLYFLTM SADRYLWLA TAESRRVAGR TYSARAVSL AVWGIVTLW LPFAVFEARLD DEQRRQCVL VFPOEAFWM RASRLYTLVL GFAIPVSTIC VLYTLLCRL HAMRLDSHAK ALERAKKRV FLVVAAILAVC LWCWTPYHLS TVVALLTDLP QTPLVIAISY FITSLTYANS CLNPFLYAFI DASFRNLQ LITCRAA</p>	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	<p>atgcaggcgg ctgggcaccc agagccctt gacagcaggg gctccttct cctccccacg A atgggtgcca agtcttctca ggacaatggc actggcaca atggcactt ctcgagacca ctggcgttcc tctatgtgt cctggccgc gtgactacg gactctggt tgtgggggtg actggcaaca cggcgctcat ccttgaatc ctaaggcgcc caagatgaa gacggtgacc aacgtgttca tctgaacct ggcgtcgcc gacgggtct tcaagctgt actgcccgc aacatcgcg agacctgtc gcagtactgg ccttcgggg agctgctctg caagctgggtg ctggccgtcg accactaca catcttctcc agcatctact tctagccgt gatgagcgtg gaccgatacc tgggtgtgt ggcacccgt aggtccgcc acatgccctg gcgacacctac cgggggggga agtgcgccag cctgtgtgtc tggctggcg tcaaggctct ggtctgccc ttcttctct tgcgtggcgt ctacagcaac gactgcaag tcccaagctg tgggtgagc ttcccggtgc cggagcgggt ctggttcaag gccagccgtg tctacactt ggtcctgggc ttcgtgtgc ccgtgtgcac catctgtgt cttacacag accctctgc caggtgcgg gcggtgcgc tccgtcttg agcagaggt ctaggcaag ccaggcgga ggtgaccgtc ctggctctcg tctgtgtgc cgtgtgctc ctctgtgga cgccttca cctggcctct gtcgtggccc tgaccacgga cctgcccag acccactgg tcatcagat gtcctacgtc atcaccagcc tcaagtacg caactcgtc ctgaacctc tctctacg cttcttagat gacaacttc ggaagaact ccgacagcata ttgctgtgt ga MQAAGHPEPL DSRGSFSLPT MGNVSDNG TGNATFSEP LPFLYVLPA VYSGICAVGL P TGNTAVILVI LRAPKMTVT NVFILNLAVA DGLFTLVLV NIAEHLQW PFGELICKLV LAVDHYNIFS SIYFLAMSV DRYLVLATV RSRHMPWRTY RGAKVASLCV WLGVTVLVLP FFSFAGVYSN ELQVSCGLS FPWPERWFK ASRYTLVLG FVLVCTICV LYTDLLRRLR AVRLRSGAKA LGKARKKTV LVLVLAVALC LCVTPFHLAS VVALLTDLPQ TPLVISMSYV ITSITYANSC LNPFLYAFLD DNFERNFRSI LRC</p>	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1	<p>atcaccagcc tcaagtacg caactcgtc ctgaacctc tctctacg cttcttagat gacaacttc ggaagaact ccgacagcata ttgctgtgt ga MQAAGHPEPL DSRGSFSLPT MGNVSDNG TGNATFSEP LPFLYVLPA VYSGICAVGL P TGNTAVILVI LRAPKMTVT NVFILNLAVA DGLFTLVLV NIAEHLQW PFGELICKLV LAVDHYNIFS SIYFLAMSV DRYLVLATV RSRHMPWRTY RGAKVASLCV WLGVTVLVLP FFSFAGVYSN ELQVSCGLS FPWPERWFK ASRYTLVLG FVLVCTICV LYTDLLRRLR AVRLRSGAKA LGKARKKTV LVLVLAVALC LCVTPFHLAS VVALLTDLPQ TPLVISMSYV ITSITYANSC LNPFLYAFLD DNFERNFRSI LRC</p>	Homo sapiens

280	3869	G Protein- Coupled Receptor HM74	NM_006018	cgccactttg ctggagcatt cactaggcga ggcgtccat cggactcaact agccgcactc A atgaatcggc accatctgca ggataccttt ctggaaatag acaagaagaa ctgctgtgtg ttccgagatg acttcattgc caaggtgttg ccgcggtgtg tggggtgga gtttatcttt gggtcttctg gaaatggcct tgcctgtgtg attttctggt tccacctcaa gtccctgaaa tcacagccgga ttttctctgt caactgggca gtactgact ttctactgat catctgctg ccgttcgtga tggactacta tgtgcggcgt tcagactgga actttgggga cctcccttcg cggctgtgtc tcttcattgt tgcctatgac cgcagggca gatactctt cctcacggtg gtggcggtag acaggtattt ccgggtgttc catccacc acccctgaa caagatctcc aattggacag cagccatcat ctctgtcctt ctgtgggga tcaactgttg cctaacagtc cacctcctga agaagaagt gctgatccag aatggcctg caaatgtgtg catcagcttc agcatctgcc ataccttcg gtggcagaa gctatgttc tcttgaggt cctctgccc ctgggcatca tctgttctg ctgagccaga attatctgga gctggtgga gagacaaatg gacgggcatg ccaagatcaa gagagccatc acctcatca tgggtgtgtg catgctctt gtcatctgct tcttcccaag cgtgtgtgtg cggatccgca tcttctggct cctgcacact tggggcagc agaattgtga agtgcaccg tgggtgacc tggcgttctt taccactctc agcttcacct acatgaacag catgtggag ccgtgtgtg actacttttc cagccatcc tttcccaact tcttccca tttgatcaac cgtgcctcc agaggaagt gacaggtgag ccagataata accgagcac gagctcgag ctacacaggg acccaaaa aaccagaggc gtccagagg cgttaattgc caactcgggt gagccatgga gccctctta tctgggcca acctcaata accattccaa gaaggacat tgcacacaa accagcatc tctggagaaa cagttgggct gttgatcga gaaatgtcac tggactcgg ctaaggtttc ctggaacttc cagattcaga gaattgatt tagggaact gtggcagat agtgggagac tgggtgcaag gttgaccac aggaatcctg gaggaacaga gactaaagct tctaggcatc tgaacttgc ttcatctctg acgtcgcag gactgaagt gggcaaatg taggcgtttc tctgagcag agttggagcc agagatctac ttgtgacttg ttggccttct tccacatct gctcagact ggggggggct cagctcctcg ggtgatctc tctgtgttc tccctgctag caggataag gagcgtgag attggaggga attgtgttc tcttgaggga agccaggga cattaaca agccagttag tcactggct tccgtgacc aattcatctt tcagacaaag ttagagaaa tggactcagg gaagagact acatgcttg gtagtatct ggtttccgg tgggtgtaat aggggattag ccccaagg gactgagta aacagtgtta ttatgggaa ggaatggca ttgtgtctt caaccagca ctaatgcaat ccattcctct cttgtttata gtaactaag ggttgagcag ttaaacaggc ttcaggatag aaagctgtt cccacctgt tegtittacc attaaaaggg aaactgctct ctgccccag gtagagggg gtgcagcttc ctctgggtc cttcgctgtt gttctgtac ttacaaaaa tctaccact caataaatt ttagaggaga caaaaaaaa a	Homo sapiens
281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	MRHLQDHF LEIDKKNCCV FRDDFIKVL PVVLGLEIF GLIUNGALW IFCEHLKSWK P SSRIFFENLA VADFLLIICL PFVMDYVRR SDWNFGDIPC RLVLFMFAMN RQSGIIFLTV VAVDYFRV HPHALNKIS NWTAAIISCL LMGITVGLTV HLKLLLIQ NGPANVCISF SICHTFRWHE AMFLLEFLIP LGIILFCSAR IWSLRQBM DRHAKIKRAI TFMVVAIVE VICFLPSVV RIRIFWLLHT SGTQNCVYR SVDLAFITL SFTYMSMLD PVVYFSSPS FPNFFSTLIN RCLQRMTGE PDNRRSTVE LTGDPNKRTRG APEALMANSG EPWSPSYLGP	Homo sapiens

282	3870	G Protein- Coupled Receptor OGR1	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atggggaaca tcaactgcaga caactcctcg atgagctgta ccatacagca taccatccac A cagacgctgg ccccggtggt ctatgtttacc gtgctggtgg tgggtctccc ggccaaactgc ctgtccctct acttcggcta cctgcagatc. aagggccgga acgagctggg cgtgtacctg tgcaactga cggtgccga cctcttctac atctgtctgc tgcccttctg cgtgcagtac gtgtgcagc agcaaaactg gtctcacggc gacctgtcct gccaggtgtg cggcactctc ctgtacgaga acatctacat cagctgggc ttctctgtct gcactccgt ggaccgtac ctggctgtgg cccatccctt cccgttccac cagttccgga ccttgaaggc ggccgtcggc gtcagcgtgg tcaatctggc caaggagctg ctgaccagca tctacttctt gatgcagag gaggtcatcg aggcagagaa ccagcacgcg. gtgtgtcttg agcactaccc catccaggca tggcagcgcg ccatcaacta ctaccgttc cttgtgggt tctcttccc catctgctg ctgtgtgct cctaccaggg cactctgccc gcgtgccc ggagccacgg caccagaag agccgcaagg accagatcca ggcgtggtg. ctcagcaccg tggctactt cctggcctg ttctgtcctt accagtggtt gctgtgtgtg cgcagcgtct gggagggcag ctgcgacttc gccaaaggcg ttttcaacgc ctaccactt tccctctgc tcaccagctt caactggctc gccgacccg tgcctactg cttcgtcagc gagaccacc accggacctt ggcccgctc cgcggggcct gccctgacct cctcacctgc tccagagacc gccgggccag ggagggctac ccgtgtgtg ccccgaggc ctcgggaaa agcggggccc aggtgagga gcccgagctg ttgaccaagc tccacccggc cttccagacc ccttaactgc caggttcggg cgggttcccc acgggcaggt tggcctag	Homo sapiens
283	3870	G Protein- Coupled Receptor OGR1	NP_003476.1	MGNITADNSS MSCTIDHTIH QTLAPVYVT VLVGFPANC LSLYFGLQI KARNELGVYL P CNLTVDLFY ICSLPFWLQY VLOHDNWSHG DLSCQVCGIL LYENIYISVG FLCCISVDRY LAVAHPERFH QFTLKAAVG VSVVIWAKEL LTIYIFLMHE EVIEDENQHR VCFEYHPIQA WQRAINYYRF LVGFLFPICL LLAZYQGLR AVRRSHGTQK SRKDOIQLRV LSTWIFLAC FLPYHVLLIV RSWEASCDF AKGVFNAYHF SLLTFSFNCV ADPVLXCFVS ETTTRDLARL RGACLAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP TGRLA	Homo sapiens	
284	3921	Prostacyclin Receptor	NM_000960	agcaagtga ggcacagacg caccgggacg gagagcctgg gcaagactgg agagcccaga A cctgggatgg cggattctgt caggaacctc acctacgtgc ggggctcgggt gggggccggcc accagaccc tgatgttctgt ggcgggtgtg gtgggcaacg ggctggccct gggcactctg agcgacggc gaccggcgcc cccctggcc ttgcgggtgc tggtaaccgg actggcgcc accgacctgc tgggcaccag cttctgagc cggcgctgt tctgtgcta tgcgcgaac agctccctgc tgggctgtgc ccgaggcgcc cccgacctgt gcgatgcctt cgccttcgcc atgaccttct tgggctgtgc gtccatgctc atctctttg ccatggccgt ggagcgtgc ctggcgctga gccaccccta cctctacgc cagctggagc ggcccgctg cgcgcgctg gcgctggcag ccatctacg cttctgctc cttctgtgc cgtgcacct cctgggctg ggccaacacc agcagtactg cccggcagc tgggtcttcc tccgatgctg ctggggccag ccggggcgcc cgccttctc cctggcctac gccggcctgg tggcctgtgt ggtggctgcc atcttctct gcaacggctc ggtcacccct agcctctgcc gcatgtaccg ccagcagaag cgccaccagg gctctctggg tccacggcg gcacccggag aggcaggtt ggaccacctg	Homo. sapiens	

285	3921	Prostaglandin NP 000951.1 Receptor	atcctgtctg ccctcatgac agtggtcatg gcctgtgtgt ccctgtcctt cactgacccg tgcttcaacc aggtgtctgc ccttgacagc agcagtgaga tgggggaccc ccttgccctt cgcttctacg ccttcaacc cactctggac ccttggtgtt cactcctttt ccgcaaggct gtcttccagc gactcaagct ctgggtctgc tgctgtgtgc tgggctctgc ccacgagagc tgcgagacac ccttttccca gctcgcctcc gggagggaggg acceaaaggc cccctctgct cctgtgggaa aggaggggag ctgctgtcct ttgtcggctt gggcgaggg gcagtgagg cccttgctc ccacacagca gtccagcggc agcgccgttg gaacgtcgtc caaagcagaa gcacagctgc cctgtcctt ctgctgacat ttcaagctga cctgtgatc tctgcccgtg cttcggggca caggagccag aaaaacagg acatggctga tggctgcgga tgctggaacc ttggccccc aactctggg cagatcagct gctgttctc ctgcggcagg gcagtcgctg ctggctctgg gaagagagtg agggacagag gaaacgttta tctggagtg cagaaagaa gtttctctca aataaaccag tggcctggcc gactgtctt ggcctggat tccccatcca tctcattgtc taaatattta gaagcggag aggtccccc aggtctctt acagtcaggt ctgtctgtgt ctgggtgttg gctccaatct gcgtccactt aggagccca actgcccacc ccaagtccc aggggatggc cctcccctc taccagcca ctccaagag cagcccctt tctgtccac aaaaaccaca gttattggaa agctccctg ccttccctt ccgtgtgtcc cccaccagg ttgggagccc tggcatcca aaggggcaac gggaggaagg ggaggtgct gcattgtgg tgatgacgta ggacatgtc ttggtacaaa aaggcctga gacattccac ct	Homo sapiens
286	3923	Prostaglandin U31099 n D2 Receptor	llgtsflspa vfvayarnss llglarggpa lcdafafamt ffglasmlll famavercla lshpylyaq l dprcarlal paiyafcvlf calplllglg hqoycpqswc flrmrwaqpg gaafslayag lvalivaif lngsvtlsl crmyrqqrh qslgprprt gevedhlll lalmtvumav csplrtirf tqavapdss emgdllafre yaenpildpw vfllrkauf qrlklwvcc lclgpa hgdso tpls q lasgr rdprapsapv kgegscvpls awgeqvepl pptqssgsa vgtssxaeas vacslc gctgtgcaac ctgcgcgcca tgcgcaacct ctatgcgatg caccggcggc tgcagcggca A cccgcgctcc tgcacacagg actgtgcga gccgcgcgcg gacgggaggg aagcgtcccc tcagcccctg gaggagctgg atcacctct ctgtctggcg ctgatgaccg tgctcttcac tatgtgttct ctgcccgtaa ttatctgcgc ttactatgga gcatttaagg atgtcaagga gaaaaacagg acctctgaag aagcagaaga cctccgagcc ttgcgatttc tatctgtgat ttcaattgtg gacccttga tttttatcat ttccagatct ccagtatttc ggatatttt tcacagatt ttctattagac ctcttaggta caggagcccg tgcagcaatt ccactaagat ggaatccagt ctgtgacagt gtttttccact ctgtgggtaag ctgaggaata tgtcaaat tcagtcacaa aacca mkspfyrcon tsvckgnsa vmgvlfstg llgnllalgl larsglwcs rrlrlplpsv P fynlvclgtv tdlgkclls pvvlaayaqn rslrvlapal dnlcqaaf fmsffglstt lqlanalec wlslgheffy rrlhtlriga lvapvvsafs lafcalpfmg fgkfvoycpq twcfiqmve egslsvlgs vlysslmall vlatvclnlg amrnlyamhr rlqhrprst rdcaepradg reaspqlee ldhllllalm tvlftmcsllp viyrayyaf kvkknrtst eeadlralr flsvisivdp wiftfrspv frifhkifi rplrysrct NSTNMESL	Homo sapiens
287	3923	Prostaglandin Q13258 n D2 Receptor		Homo sapiens

288	3924	Prostaglandin E1 Receptor EP1	NM_000955	<p>ggggggggcga gggctgagcg ggcggtgatg gggaccaccac atcccaggca gtgcggcgac A</p> <p>ccttgccgc tgacatgagc ccttgccggc cctcaacct gagcctggcg ggcgaggcga</p> <p>ccacatggc ggcgcccctg gtcccaaca cgtcgccgtg ggcgcccgtg ggccttccg</p> <p>ccgctgccc catctctcc atgacgtgg ggcgctgtc caactgtg ggcctggcg</p> <p>tgctggcgca ggcgcccggc cgcctggcg ggcgcccgtc gcccaccacc ttcctgctgt</p> <p>tgctggcgca cgtgctggcg accgacctg cgggcccgtg gcccggcg cctgctgtg</p> <p>tgctgtgta cactgcccgg cgcctcccgg cgggcccggc ctgcccactc ctgggcccgt</p> <p>gcatggtctt ctgcccctg tgcccctgc cgcgcccgtg tgcatggcg gtgagcgct</p> <p>ggctggggcg cagcggcg cgtctccacg cgcgcccgtg ctggtcgcc cgcgcccgc</p> <p>tgccgctggc cgcgctggc ggcgtggcct tggcctggc gctgctggc ggcgcccgc</p> <p>tgccgctgta tgactggcg taccgggca cgtggtgct catgcccgtg ggcgcccgc</p> <p>gggctggcg ccaggcactg ctgctggcg tcttggcg cctgcccgtg gtcgcccgc</p> <p>tgccgctgt ggtgtgcaac acgtcagcg gctggcct gcatcgcc cgtggcgac</p> <p>ggcgtcccg accgctccc cgcgctcag gcccgcag cgcgctgc tggggggcg</p> <p>acggacccc cgcgctcc cctgctccg cctgctccat cgttggcg tccactct</p> <p>ttggcgctc tgggagcag gctcggcg cagagctcg cgcgcccag gtgagatgg</p> <p>tgggccagt tgcgtgac atggtggtg cgtgcatctg ctggagccca atgtggtgt</p> <p>tggtggcgt ggcgctggc ggcgtggcg ctacctcct gaagcgcca ctgtctctg</p> <p>cgtgcccgt tgcctcctg aaccagatc tggacctg ggtgtacac ctactggcg</p> <p>agccctgct ggcgcaactg cctgcccct tgcgcccag ggcgaggcg aagggcgcg</p> <p>ccgcccgtt ggcgcaactg cgcgcccct ggcgaggcg cgtgctgc agtcccgcg</p> <p>acagcgct cagccactc taagcaaac cagagccca cagactaag cagccacc</p> <p>tgggctggc ccaggtgcg ggcgagcg ctttgggaat aaaaagccat tctggc</p>	Homo sapiens
289	3924	Prostaglandin E1 Receptor EP1	NP_000946.1	<p>MSPCGPLNLS LAGPATTCAA FWPNFSAVP PSGASPALPI FSNLTGAVSN LLALLAQA P</p> <p>AGLRRRRSA TTFLLFVSL LATDLGHVI PGALVRLYT AGRAPAGGAC HFLGCMVFF</p> <p>GLCPLLGCG MAVERCVGT RPLHARVS VARARLALV GVALLALV CNTLSGLALH RARWRRSRR</p> <p>LQYEGTWCFI GLGPPGWRQ ALLAGLFASI GVALLALV VAAVALAVAL LPLARVGRYE</p> <p>PPASGPDSS RRGAGGPRS ASASSASSIA SASTFFGSR SSGSARRARA HDVENVGQLV</p> <p>GIMVSCIW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SNQILDPMV YILLQAVLR</p> <p>QLRLLLPPRA GAKGPGAGLG LTPSAWEASS LRSSRHSLG HF</p>	Homo sapiens
290	3925	Prostaglandin E2 Receptor EP2	NM_000956	<p>gggcccgcgt cggcgcgctg ggtgcggga ggggctctg gattcggc cctcccctt A</p> <p>ttctctgag tctcggaacg ctcagctct cagaccctt tctcccag taaaggcgg</p> <p>gagaggagg cgcctctct ttccaggcac cccaccatgg gcaatgcct caatgactcc</p> <p>cagctgagg actgcgagc gcgacagtgg cttcccacag gcaaaagccc agccatcgc</p> <p>tcgctcatg tctcgccgg ggtgcctggg aacctcatg cactggcgct cttggcgcg</p> <p>cgtggcggg gggagctggg gtgcagcgcc ggcgcaagg gctcccctc cttgtccac</p> <p>gtctggtga cggagctgg gtacacgac cgtcctggga cctgcctcat cagccagtg</p> <p>gtactggct cgtacgcgg gaaccagacc ctgggtggc tggcgcccga ggcgcccgc</p> <p>tgcacctact tgccttccg catgacctt ttcagcctgg ccagatgct catgctctc</p> <p>gcatggccc tggagcgcta cctctgac cctctgac gggcaccct actctacca ggcgcccgc</p> <p>tggcctccg ggggctggc cgtgctgct gcatctatg cagtctcct gctctctgc</p>	Homo sapiens

291	3925	Prostaglandin E Receptor EP2	NP_000947.1	MGNASNDQS EDCETQWL P ESPEAYSSV MFSAGVLGNL IALALLARRW RGDVGSAGR P RSSLSLFHV L VTELVTDLL GTCLISPVVL ASYARNQTLV ALAPESRACT YFAFAMTFFS LATMLMFEAM ALERYLSIGH PYFYQRRVSA SGGVLVLPVI YAVSLIFCSL PLIDYGYVQ YCPGTWCFFIR HGRTAVLIQLY ATLLILLIVS VLACNFSVIL NLIRNHRRSR RSRGGSISGS GRGPGARRR GERVSMAEET DHLILLAIMT ITFAVCSLPF TIFAYMNETS SRKEKWDLOA LRFLSINSII DPWVFAILRP PVRLMRSLV CCRISLRTQD ATQTSCTQS DASKQADL atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa	Homo sapiens
292	3926	Prostaglandin Receptor EP2	L32662	atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa	Homo sapiens
293	3926	Prostaglandin Receptor EP3	NM_000957	accagagggt tcccagagag gaaggcgtgg ctccctcccg ggccagtgag ccctggcgcc A gccggggccg cgggtccagc agcgagtag ggccggcggt gcgcccgca ccatgggggg cagcccgacc ccagccggcg taaacgcga cctccggcg gcgccggcg gcgtctgccc	Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	<p> cctcccgctg cggctctctg gacgcctacc cctctcacc tcgaagccaa catgaaggag acccgggct acggaggga tgccctctc tgacccgctc tcaaccact ctacacaggc atgtgggctg ccgagggctc cgcgaggcg cggggcaacc tcacgccc ccagggtct ggcgaggatt gcgatcggt gctcggtgc tcccgatca ccatgtgct cactggttcc gtggcaaacg cactggccat gctgctgctg tgcgagctg accggcgccg ggagagcaag cgcaagaagt ccttctctgct gfgcatcgcc tggctggcgc tcacgacct ggtcgggcag cttctacca ccccggtcgt catcgctgctg tacctgttcc agcaggttg ggagcacatc gaccgctgg ggcggtctg cactttttc ggcgtgacca tgactgtttt cgggtctctc tcgttgttca tgcceagcg catggccctc gagcggggcg tggccatcag ggcgcgcac tggatgcga gccacatgaa gacgctgccc acccgcgctg tgtgctcgg cgtgtggctg gctgtgctg ccttgcctt cgtgcggctg ctgggctggt gccagtacac cgtccagtgg ccgggagct ggtgcttcat cagcacccgg gagggggcg accggactag ctcttgcct aactggggca accttttctt cgcctctgct ttgtccttc tgggctctt ggcgtgaca gtcaccttt cctgcaacct ggcacacctt aggcccttg tgcgcgctg ccgggccaag gccacggcat ctacgtccag tcccagtggt ggcgcgcatc cgacgagac ggccattcag cttatgggga tcatgtgctg ggcgcctgat ggaaggtggt ttgtcatgc atggaggcag aaatgatct tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttctaat agctgttgc ctggtctcag tgaaccagat cttggatcct tgggtttacc tgcgttaag aaagatcctt ctccgaaagt ttgcccagat gagaaaaaga agactcagag agcaagatg ggcgcctgat ggaaggtggt ttgtcatgc atggaggcag gtcccagga cttggtgcag tctctgat agagaacct gcagtgtcca gctaaagctga tgactgaag ataaatctgc ttaaccctgg gatgaagtat ctgtgacta ttttgacagc agatgaggaa ttttgggaa ataaacctt gcttcttcg caggatcaca tcactggaag ctccatgact ctcttttctg aaagaaaaa aaatcacag aaacccac cccccaaact attctctttt acttcttccc ccaagcccac ccccaaatat aactgttatc cagaagctgt tatgtcctgt ttccatcat gttttgtac ttttactata tctacatata tcaattaaac ttatgtccta ttggtttgtg aatttatatt tgcgtatata ttatcatatg taaaatttgc atttttttat tgaataattat gtttcttgag atttatccac attgaaacat ggagctctaa atcgttaatt ttaaccgcta tagagtattc cataattga ataaagcata attgtttgtg ac </p>	Homo sapiens
295	3927	Prostaglandin E4 Receptor EP4	NM_000958	<p> cggcagagcc tcaacctga acgtgtcct cccgagagc agaccggcg gcaactgaaa A gctgggactc gtcttttaag gaaaaaaat agcagtaag aaatccagca ccattcttca ctgacccatc ccgctgcacc tctgtttcc caagttttt aaagctggca actctgacct cgggtgtccaa aaatcgacag ccaatgagac cggctttgag aagccgaaga tttggcagtt </p>	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	<p> tccagactga gcaggacaag gtgaaagcag gttggaggcg ggtccaggac atctgagggc tgacctggg ggctcgtgag gctgccacog ctagctgcgc tacagaccca gccttgcaat ccaagctgc gcaccgccag ccaatataat gtcactccc ggggtcaatt cgtccgcctc cttgagcccc gaccggctga acagccagat gacatcccc gcggtgatgt tcatcttcgg ggtggtgggc aacctggtgg ccatcgtggt cctgtgcaag tcgcgcaagg agcagaagga gacgacctc tacacgtgg tatgtgggt ggtgtgacc gacctgtgg gcaattgtt ggtgagcccc gtgaccatcg ccacgtacat gaaggccaa tggccgggg gccagccgt gtgcagtagc agcacctca ttctgtctt cttcagcctg tccggcctca gcatcatctg cgccatgagt gtgagcgct acctggccat caaccatgcc tatctctaca gccactacgt ggacaagca ttggcgggcc tccgctctt tgagtgctat gctgcaacg tgcctctttg cgcgctgcc aacatgggtc tggtagctc ggggtgcag taccagaca cctgtgtgctt catcgactgg accaccaacg tgacggcgca cgcgcctac tctacatgt acgcggtt cagctccttc ctcatctcg ccacgtcct ctgcaacgtg cttgtgtgcg gcgctgtgt ccgcatgcac cgcagttca tggcggcac ctgctgggc accgagcag accacgggc cgcggcgcc tgggttgctt cccggggcca cccgctgccc tcccagcct tgcggcct cagcgacttt cggcgccgc ggagcttcg cgcctgcg ggcgcgaga tccagatggt catcttactc attgccact cctgtgtgt gctcatctgc tccatccccg tctgtgtgcg agtattcgtc aaccagttat atcagccaag ttgtgagcga gaagtcagta aaatccaga tttgaggcc atccgaattg ctctgtgaa ccccatcta gacctgga tatatacct cctgagaaag acagtgtca gtaagcaat agagaagat aaatgctct tctgcgcac tgccgggtcc cgcaggagc gctccggaca gcaatgctca gacagtcaa ggacatctc tgccatgtca gcccacttc gctcctcat ctccgggag ctgaaggaga tcagcagtag atccagacc ctctgcag acctctact gcccagcct agtgaatg gccttgagg caggaatttg ctccaggtg tgcctggcat ggcctggcc caggaagaca ccactcact gaggacttg cgaatatac agacctcaga ctctcacag ggtcagact cagagatgt cttactggtg gatgagctg gtggagcgg cagggtggg cctgccccta aggggagctc cctgcaagtc acatttcca gtgaacact gaattatca gaaaatgta tataataggc aaggaagaa atacagtact gttctggac cctataaaa tctgtgcaa tagacacata catgtcacat ttagctgtc tcagaaggc tatcatca LAVTDLGLT LVSPVTIATY MGQWPGGQP LCEYSTFILL FFSLSGLSII CAMSVRYLA INHAYFYSHY VDKRLAGLTI FAVYASNVLF CALPNMGLGS SRLQYPTWC FIDWTNVT HAAYSYMYAG FSSFLIATV LGNVLCGAL LRMHRQEMRR TSLGTEQHA AAAASVNRG HPAASPALPR LDFRRRSF RIAGAEIQM VILLIATSLV VLICSIPLV RVFNOLYQP SLEREVSKNP LQAIRASV NPILDPWIYI LLRTVLSLA IEKIKCLFCR IGSSRRERSG QHCSDSQRTS SAMSCHSRSE I SRELKEISS TSQTLLPDL LPLDSENGLG GRNLLFGVPG MGLAQEDTTS LRTLRISETS DSSQGDSES VLLVDEAGGS GRAGAPKGS SLQVTFPSET LNLSKCI </p>	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	<p> ggcggggggc gccatggcac accgagcgc tccgtctctt gctctcaga gagccggct A ggcggcctgg gatgacaaga tctctggact gcaatcctgc acagtittga gagggagatg acttgagtgg ttggctttta tctccacac aatgtccatg acaattcca aacagctagt </p>	Homo sapiens

gtctcctgca gctggcgttc tttaaacac aactgcccag acggaaaacc ggttttccgt
atTTTTtca gtaattctca tgacagtggg aatctgtca aacagccttg ccacgcceat
tctcatgaag gcatatcaga gatttagaca gaagtccaag gaatcgtttc tgcctttggc
caggggcctg gtaatcactg atttctttgg ccattccatc aatggagcca tagcagtatt
tgtatatgct tctgataaag aatggatccg ctttgaccaa tcaaatgtcc ttggcagtat
ttttgggtac tgcattggtt ttcttggtct gtgcccactt cttctaggca gtgtgatggc
cattgagcgg tgtattggag tcacaaaacc aatatttcat tctacgaaaa ttacatccaa
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caacattgga ataatggaa atcattctct ggaacctgt gaacaaacac tttttgctct
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tgtccttaag aatctctata agcttgcccag tcaatgctgt ggaagtgcag tcatcagctt
acataattgg gagcttagtt ccattaaaaa ttctttaaag gttgctgcta tttctgagtc
accagttgca gagaatcag caagcaccta gottaatagg cagtaaaatc tgtgtggggc
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aatttgtcaa ataaacagga taactgtaca ttttcaactt gtttttgcca atgggaggta
gacacaataa ataatgcca tgggagtcac actgaaagca attttgagct tatctgtctt
atttatgctt tgagtgaac atctgttgag gtctaatttt ttgagatcac cgtctgttag
gagaacatct taatgcagcc tgcatagtga aatggttatt ttgagatcac cgtctgttag
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aatatataaa ttcaagact atctgcagct agtgtgttcc ttctttacac acatatagac
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tattataaca attactagg agatcaagag ataataatct ctocccaaat ttccaataa
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tgtatttctg tataagattt ctttgccttc attaaaaatg ggattcattt aaaaattaat
ctttccctgt taggtgtgatt tcagattctc taggaatatct ggtgaagtaa ccagaagact

298	3928	Prostaglandin F2- α Receptor	NP_000950.1	MSMNSKQIV SPAAALLSNT TCQTERLSV FFSVIFMTVG ILSNSLATAI LMKAYQRFQ P	Homo sapiens
				ttcagatggt ttatttgctt tcagcagaga attatttca tacagttaact taagagtgtt gatgtcttgt gaacagagat ataaggaacc attctccatc cttcttattc atgtctggga caatgctctt atgaatattt ccatgtattt tgactgggga gaggcatgga gaagaaactc tcatttcagg gcctcaggat ccttctctt gaggcttcta aataaatggc agaattcttg ctgtattgcc atgatgtcac cctggccatg tgtactgact tgaggagatc ttgcaacatg gccatgtgca aggttttaag gactgagaga gatgtgaca tatcttagga gggttatcta tgttatctga gtatatgtt gggtaaccaa attggtctta aaatgatgt taacccaaga agtagacatc aaaaattaaa aaaaaaaaaa aaaa	
299	4051	Proteinase-Activated Receptor 2	NM_005242	KSKASFLLA SGLVTDFFG HLINGAIAVE VYADKEWIR FQSNVLC SI FGICMVFSGL CPILLGSVMA IERICGVTKP IFHSTKITSK HVKMMLSGVC LFAVFIALLP ILGHRDYKIQ ASRTWC FYNT EDIKDWEDRE YLLLESFLGL LAIGVSLICN AITGITLLRV KFKSQOHRQG RSHLEWVIQ LLAIMCVSCI CWSPELVTA NIGINGNHSI ETCETTLFAL RMAWNOILD PMVYILLRKA VLKNDYKLAS QCCGVHVISL HIWELSSIKN SLKVAALSES PVAEKSAST cgccccccc tggggaggcg cgcagcagag gctccgattc ggggcaggtg agaggtgac A tttctctcgg tgcgtccagt ggagctctga gttctgacatc ggtggcgcg gattccccgc gcgccccggc tgggggcttc caggaggatg cggagcccca ggcggcgctg gctgctgggg gcgcccattc tgcagcagc ctctctctcc tgcagtggca ccatccacgt cactggaaaa tctctaaag gaagaagcct tattgttaag gttgtaggca catccacgt cactggaaaa ggagttaacag tgaacacagt cttttctctg gatgagttt ctcgactctg ctcacttgga aaactgacca cggctcttct tccaatgtgc tacacaattg tgttgtgtg ggttttgcca agtaacggca tggccctgtg ggtcttctt ttcggaacta agaagaagca cctgtctgtg atttacatgg caatcttggc cttggctgac ctctctctct tcatctgggt ccccttgaag attgacctat acatacatgc caacaactgg atttatggg agctctcttg taatgtgctt attggctttt tctatggcaa catgtactgt tccattctct tcatgacctg cctcagtggt cagaggtatt ggttcactgt gaacccatg gggcactcca ggaagaaggc aaacattgcc attggcatct ccttgccaat atggctgctg attctgctgg tcaaccatccc ttgtatgtc gtgaagcaga ccatcttcat tctgccccg aacatcaga cctgtcacta tgttttgctt gagcagctct tgggtgggaga catgttcaat tacttctctc ctctggccat tgggtctctt ctgttcccag ccttctctac agcctctgcc tatgtgtgga tgatcagaat gctgcgatct tctgccatgg atgaaaactc agagaagaaa aggaagaggg ccatcaaatc cactgtcact gtcctggcca tgtactgtat ctgcttcaat cctagttaac ttctgctgtt ggtgcattat tttctgatta agagcaggg ccagagccat gtcctatgcc tgtacattgt agcctctggc ctctctaccc ttaacagctg cctgcacccc ttgtctatt acttgtttc acatgatttc agggatcatg caaagaacgc tctctcttgc ggaagtgtcc gactgtaaa gcagatgcaa gtatccctca cctcaaaaga acactccagg aaatccagct cttactcttc agttcaacc actgttaaga cctctattg agtttccag gtcctcagat ggaattgca cagtaggag tggaacctgt ttaatgttat gaggaagtgt ctgttatttc ctaatcaaaa aggtctcacc acataccacc g	Homo sapiens
300	4051	Proteinase-Activated Receptor	NP_005233.2	MRSPSAWLL GAAILLAASL SCSGTIQGTN RSSKGRSLIG KVDGTSHTVG KGVTVETVFS P VDEFSASVLT GKLTTVFLPI VYTVFVVGL PSNGMALWVF LFRKKKHPA VIYMANLALA	Homo sapiens

301	4052	Proteinase- Activated Receptor 3	NM_004101	<p>DLISVWFFPL KIAYHIHANN WIYGEALCNV LIGFFYGNMY CSILFMTCLS VQRYWVIVNP MGHSRKKANI AIGISIAIWL LILLVTIPLY VVKQTIFFPA INITTCNDVL PEQLLVGDMF NYFLSLAIGV FLFPALFTAS AYVLMIRMLR SSANDENSEK KRRAIKLIV TFLANYLICF TPSNLLLVVH YFLIKSQGS HVYALIIVAL CLSTLNSCID PFVYFVSHD FRDHAKNALL CRSVRTVKQM QVSLTSKKHS RKSSSYSSSS TTVKTSY</p> <p>cctgcctgca cggcacagga gagcaaaact ctacagacag accaaggctt ccatttgctg A ctgacacatg gaactgaggt gaaattgtgc tccatgattt tacagatttc ataacgttta agagacggga ctacaggtcat caaaatgaaa gccctcatct ttgcagctgc tggcctcctg ctctgttgc ccacttttg tcagagtggc atggaaaaatg atacaaaaca cttggcaaaag ccaaccttac ccattaagac ctctctgtga gctcccccaa attcttttga agagtccccc ttttctgctt tggaggctg gacaggagcc acgattactg taaaaattaa gtgacctgaa gaaagtgcct cacatctcca tgtgaaaaat gctaccatgg gtaacctgac cagctcctta agtactaaac tgatacctgc ctctacatct ctggtgtttg tagttgtgtt cccggccaat gctgtgacc tgtgatgct tttctcagg accagatcca tetgtaccac tgtattctac accaacctgg ccattgcaga tttctctttt tgtgttaaat tggcctttaa gatagcttat catctcaatg ggaacaactg ggtatttggg gaggtcctgt gccggggccac cacagtcac ttctatggca acatgtactg ctccattctg ctccctgctt gcatcagcat caaccgctac ctggccatcg tccatccctt cactacccgg ggctgcccga agcacaccta tgccttggtta acatgtggac tgggtgggc aacagttttc ttatatatgc tggcattttt catactgaag caggaatatt atcttgttca gccagacatc accacctgcc atgatgttca caacattgc gagctctcat ctcccttcca actctattac ttcatctctt tggcattctt tggattctta attccatttg tgcctatcat ctactgctat gacgccaata tccggacact taatgcatac gatcatagat ggttgtggtta tgttaaggcg agtctcctca tccctgtgat ttttaccatt tgccttgctc caagcaatat tattcttatt attcaccatg ctaactacta ctacaacaac actgatgctt tcttttatt atctctcata gctttgtgac tgggtagtct taatagtgc ttagatccat tcttttatt tctcatgtca aaaaccagaa atcactccac tgcctactt acaaaatagt gaaatgatct tagagaacaa ggacagccat cactctccac gctgttttc aagacaaca taagcatagt gcaaggagct ccatttccga gctctaaga aatatgcttc aaaggtcaaa cattacaaa gcattagtag ttgtttgtt ttgttttgag actgagctc actttatcac ccagactggc gtgcagtggc actatcttgg cteattgcaa cctctgcctc ccaggtcagc ctcccaagta gctgggatta caccaccatg ccagctact aaaaatactt gtatttttag tagagacggg gtttcacat gttgaccagg ctggtcttga actcctgacc tcaagtgatc ttcgggctc agctcccaa agtgctggat tacaggcgtg agccactgag ccagccagca ttagtaattt ttaaaaacac ttatcatgta ttttaaaaat gtaaatggag gagaaaagat atcacaactc tatggaaaat gacatttcca ttgaccttat tgcctactta agctctttaa atcacatct tccctatttc</p>	Homo sapiens
302	4052	Proteinase- Activated Receptor 3	NP_004092.1	<p>MKALIFAAAG LLLLPFTFCQ SGMENTNNL AKPTLPKTF RGAPPNSFEE PFPSALEGWT P GATITVKIKC PEESASHLV KNATMGVILTS SLSTKLIPAI YLLVFWGVGP ANAVTLMMLF FRTSICITV FYTNLAIADF LFCVTLPEFKI AYHLNGNNWV FGEVLCRAIT VIFYGNMYCS ILLACISIN RYLALVHPFT YRGLPKHTYA LVTGGLWNAT VFLLMLPFFI LKQEYLVQRP DITTCNDVHN TCSSSPFQL YYFISLAFFG FLIPFVLIY CYAAIIRTIN AYDHRWLWYV</p>	Homo sapiens

303	4090	G Protein- Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI LIIHHANYYY NNTDGLYFIY LIALCLGSIN SCLDPFLYFL MSKTRNHSTA YLTK	ccgacacca cggcgaggaga tcaactgctg ccccgacagac cccgtgtccct tctcccggg A ccagcageta gaggatgtcc aaacgaggtt ggtgggctgg atccagaaag cccccaagag agatgtgaa actctcaggc tctgactcca gccaaagcat gaatggcctt gaagtggctc ccccaggtct gataccaac ttctccctgg ccacggcaga gcaatgtggc caggagacgc cactggagaa catctgttgc gcctccttct acctcttggg ttttatcctg gcttagttg gcaataacct ggetctgtgg cttttcatcc gagaccacaa gtccgggacc ccggccaacg tgttctctgat gcaatctggc gtggcgact tgtctgtcgt gctgtctctg cccaccggcc tgttctacca cttctctggg aaccactggc catttgggga aatcgcatgc cgtctcaccg gtttcctctt ctactcaac atgtacgcca gcaatctact cctcacctgc atcaggcccg accgtttcct ggccatttg caccgggtca agtccctcaa gtcccgagg cccctctacg cacacctggc ctgtgcttc ctgtgggtgg tgggtgctgt ggccatggcc ccgtgtctgg tgagccaca gacgtgagc accaaccaca cgggtgctct cctgcagctg tacgggaga aggcctcca ccatggcctg gtgtccctgg cagtggcctt cacttccg ttcatacca cgttcaacct ctactgctg atcatcgca gctgcggga gggcctgct gtggagaagc gctcaagac caaggcagt cgcctgctg ccatagtgtt ggccatcttc ctgtctgct tctgccccta ccaactcaac cgtcctgctt acgtgtgca ctaccgagc catggggcct ctgtgcccac ccaggcgcat ctggcctgg caaacgcgt cactcctgc ctaccagcc tcaacggggc actcgacccc atcatgtatt tcttctgttc tgagaagttc cgcacggcc tgtgcaactt gctctgtggc aaaggctca agggccgccc cccagcttc gaaggaaaa ccaacgagag ctgctgagt gccaaagtcag agctgtgagc gggggggccc gtccaggccg agcgagact gtttaggact cagcagacc agcaagaggc atctgccc ttcccagcca ctctccagc agcaacctg aaatctcagc agatgcccac cattctcta gatcgctag tctcaacca taagaaggaa gaactgaca aggggatcca tggccacccc ctctgaggg gcttgtgat gctacaatgg ctctagaca ctcaacgact tcatctgtgg caggagaga ggagggccgga agaacaacc ctgaacaatg gaggccttc ttccccgcta ggctcccagc ctccttccc ctacagaatc gctcctggc gaggtcagc agaagacc tgaaggcagg ctgcaaatga cccagaagag ggacctggga gtcctgttgg ggacggggag ggagtctcaa tactcctttg cagcgcaagg tactctgagt cccctctgta gtgctctgc cagacacaa ctgctgagt tgaagagaca caggccacac atttcaggct ggttgccagc ggactcagc actcacggcc tgcggggact cagcacagct ctggattctg gatctcctt gctgtaaccc cagcacaag cctgcaacc ccagagctct ttgacaggct cccaggcctc ccagtctgg acaagcatgt gactcaccg gactcagct caggccaggg ctgggctgtg cactgctc ccactgacc agaccactt cctccagaga ggcctctc cgcctgact atttccctg ctagtgtga gatattccc taacatgtcc tttttgtat ttgttgtac ggaccataaa tataactgta gctttaagac taataaaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	MSKRSWAGS RKPPREMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM P LFASFYLLDF ILALVGNLTL LWFIFRDHKS GTPANVFLMH LAVADLSCVL VLPRLVYHF SGNHWPFG EI ACRLTGFLFY LNMYSIYFL TCISADRF LA IVHPVKS LKLR RPLXAH LAC AFLWVVVAVA MAPLIVSPOT VQTNHVVVCL QLYREKASHH ALVSLAVAF TFPITVTCY	Homo sapiens	

305 4254 Rhodopsin NM_000539
 LLIIRSLRQG LRVEKRLKTK AVRMIIVLA IFLVCFVPYH VNRSVYVLHY RSHGASCATQ
 RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKGPFP SFEKTNES
 LSAKSEL
 agagtcaccc agctggagcc ctgagtggct gagtcaggc ctctgcagca ttcttgggtg A Homo
 ggagcagcca cgggtcagcc acaaggcca cagccatgaa tggcacagaa ggccctaact sapiens
 tctacgtgcc ctctccaat ggcacgggtg tggtagcagc ccccttgcag taoccacagt
 actacctggc tgagccatgg cagtctcca tgcctggcgc ctacatgttt ctgctgatcg
 tgctggggtt ccccatcaac ttctccacgc tctacgtcac cgtccagcac aagaagctgc
 gacgcctct caactacatc ctgctcaacc tagcgtggc tgacctcttc atggtcctag
 ttggcttcac cagcacctc tacacctctc tgcattgata ctctgtcttc ggccccacag
 gatgcaattt ggagggttc ttggccaccc tgggctgtga aattgccttg tggctcttgg
 tggctcctgg catcgagcgg tacgtgtgtg tgtgtaagcc catgagcaac ttccgcttgc
 ggagaaacca tgcctcatg ggcgtgtcct tcacctgggt. catggcgctg gctgcgcgcg
 caccccact cgcgggtgg tccaggtaca tcccggagg cctgcagtcg tegtgtgga
 tgcactacta cagctcaag cgggaggtca acaacgagtc tttgtcatc tacatgttgc
 tggctccactt caccatccc atgattatca tcttttctg ctatgggcag ctgctcttca
 cgtcaagga ggcgctgccc cagcagcagg agtcagccac cacacagaag gcagagaag
 aggtcacccg catggtcatc atcatgttca tgccttctct gatctgttgg tgcctctacg
 ccagcgtggc attctacatc ttcccccacc agggctccaa ctctcgctcc atctcatga
 ccatcccggt gttctttggc aagagcgccg ccatctacaa cctgtctc tctatcatga
 tgaacaagca gttccgggaa tgcattgtca ccacatcttg ctgctggcag accacactgg
 gtgacgatga ggcctctgct accgtgtcca agacggagac gagccaggtg gcccggtcct
 aagacctgct taggactctg tggcgacta taggcgtctc ccatccctca cacttccc
 cagccacagc cctccacca ggagcagcgc ctgtgcagaa tgaacgaagt cacataggct
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 gcttgagaag ggacatccac caagacctac tgatctggag tcccacgttc cccaaggcca
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 atatctatcc tctcagacc tgcagcagc agcaactcat acttggctaa tgatatggag
 cagtgtgttt tccctccctg ggcctcactt tcttctcta taaatggaa atccagatc
 cctggctctg ccgacacgca gctactaga. agaccaaaag aggtgtgtgt gtgtctatgt
 gtgtgttca gcactttgta aatagaaga agctgtacag attctagtta atgtgtgaa
 taacatcaat taatgtaact agttaattac tatgattatc acctctgat agtgaacatt
 ttgagattgg gcatcagat gatggggttt caccacaact tggggcaggt ttttaaaat
 tagctagcca taaaggccag accagggtg. ggggttgggc ttaggcagg gacagtca
 ggaatgcagg atgcagtcac cagacctgaa aaaaacaac tgggggagg ggacgtgaa
 ggccaagtcc ccaatgagg tgagattggg cctgggggtct caccctagt gtggggccc
 aggtccctg cctcccttc ccaatgggc ctatggag acaggccttt ctctcagct
 ctggaagcca cctgctcttt tgcctagca cctgggtccc agcatctaga gcattgagcc
 tctagaagcc atgctcacc gccacattt aattaacagc tgagtccctg atgtatcct

306	4254	Rhodopsin	NP_000530.1	<p> taccgaaga gcttagaaga aagagtgagg aaattccact gggccctacct tccctgggga tgttcattggg cccagtttc cagtttccct tgccagacaa goccatttc agcagttgct agtccattct caattctgga gaattctgtc caaaagtgct gaccatctc tgaggtgtca gaattagct cctcagtaa ctgtccccc ttctccatat aagcaagcc agaagctcta gctttacca gctctgctg gagactaagg caaatggggc cattaaaagc taagctccta tgttggtatt aacggtggtg ggtttgttg ctttcacct ctatccacag gatagattga aactgccagc ttccacctga tcctgaccc tgggatggct ggattggca atgagcagag ccaagcagca cagagtcacc tggggctaga ggtggaggag gcagtcctgg gaatgggaaa aacccca </p>	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p> VTVQHKKLRT PLNYILLNLA VADLEWVGG FTSTLYTSLH GYFVFGPTGC NLEGGFATLG GEIALWSLW LAIERVAVVC KPMNSFRFGE NHAIMGVAF WYMALACAAP PLAGWSRYTP EGLQCSGID YTIKPEVNN ESFVIYMFV HFTIPMIIF FCYGLVFTV KEAAQQQES ATTQKAEKV TRMVIIMVIA FLICWVPYAS VAFYIFTHQG SNEGPIEMTI PAFFAKSAAL YNPVIYIMN KQFRNCMLTT ICCGNPLGD DEASATVSKT ETSQVAPA agagacagct gggccactgg cagtgaggga gagtaggat ggcagagacc agtgccctgc A ccaatggctt cggggagctc gagtgctgg ctgtggggat ggtgctaact gtggaagctc tctccggtct cagctcaat accctgacca tctctcttt ttgcaagacc cggagctgc ggaactccctg ccaactact gtgtgagct tggctcttgc ggcactaggg atcagctga atgcccctgt tgcagccaca tccagcttc tccggcgtc ggcactaggg tggagcggct gccaggctca cggcttccag ggctttgtga cagcgttggc cagcatctgc agcagtgccg ccaatgcagt gggcggttat caccactact gcaccgctag ccaagtggcc tggaaactcag ccgtctctct gtgtctcttc gtgtggctgt cttctgctt ctggggcagct ctgcccttc tgggttgggg tcaatatgac tatgagccac tggggacatg ctgcaccctg gactactcca agggggacag aaacttacc agcttctct tcaactatgt cttcttcaac ttcgccatgc cctcttcat cagctacact tctacagtc tcatggagca gaaactgggg aagagtggcc atctccaggt aaacaccact ctgccagcaa ggacgctgct gctcggctgg gcccctatg ccaatcctgta tctatacgca gtcacgcag acgtgacttc catctcccc aaactgcaga tgggtccgc cctcattgcc aaaaatgtgc ccacgatcaa tgcacatcaa tatgccctgg gcaatgagt ggtctgcagg ggaatctggc agtgcctctc accgcagaa agggagaagg accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagga gtctgccca gcagcctcg tggccaagcc cagacactca cccaccttc cagtgggccc cgtggatcct ggtcctaggc tggacacagg attcagaag acaccaggct gcacagaag agccagatgg acctgagtgt cggtcacag cccctacact caaggctgag aggcctcagg aaagtcattc ctttttaaa ataataata atgtaagggg gtacagtgca gttttgttac atggatagat tgcctagtg tgaagtctgg gcttttagtg taaccatcac cctaataata tacgttgtag ccattaagtt atttctcat cctcacccc tccaccttg tccacctct gagtctccaa tgtctattat tccacactcc atgtccagct gtacacatta tttagctccc acttacaagt gagaacatgt ggtattgac ttcca </p>	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	<p> MAETSALEPTG FGELEVLAVG MVLLVLAISG LSLNLTITFS FCKTPELRTP CHLLVLSLAL P ADSCISLNAI VAATSSLLRR WPYGSDGCA HGFQGFVVAL ASICSSAATA WGRYHYHCTR </p>	Homo sapiens

309	4321	Coupled Receptor RPE	NM_002980	<p> SOLAWNSAVS LVLFWLSSA FWAALPLLGW GHYDPEPLGT CCTLDYSKGD RNFTSFLFTM SFENFAMPLF ITITSYSLME QKLKSGHLQ VNTTLPARTL LLGWGPVAIL YLYAVIADVT SISPKLQWVP ALIAKWVPTI NAINVALGNE MVRGTWQCL SPQKREKDRY K acgaggccgg cggagcccg ggaccctcg cggggcgctg agtcccgag cgggcagag A gcacggcag gggagcgtg ggggcccctc ggggaacgtg cgggcacat cggccccac ctgtcgccg cgtgcagca gctactactg cgggtgctgc tgcctgcgc cgcgcactcg actggagccc tccccgact atgtgacgtg ctacaagtgc tgtgggaaga gaaagaccag tgcctgcagg aactctccag agagcagaca ggagacctgg gcacggagca gccagtgcc gggttgagg ggaatgggga caacataagc tgcctgcccct cttctgtgcc gggccggatg gtggaggtgg aatgcccag atctctcgg atgtcacca gcagaaatgg ttccttgttc cgaaactgca cacaggatgg ctggtcagaa acctccccca ggctaatact ggctgtggc gttaatgtga acgactcttc caacgagaag cggcacctct acctgtgaa gctgaaagtc atgtacaccg tgggctacag ctctccctcg gtcatgtctc tggcgccct tggcatcttc tgtgtcttc ggaggctcca ctgcaatgc aactacatcc acatgacct gttcgtgtcc ttcatcttc gtgcccctgc caacttcac aaggagccg tgcctcttc ctcagatgat gtcacctact gcatccgca caggcgggc tgcaagctgg tcatgtgtct gtccagttac tgcatactgg caactactc ctggtgtgtg gtggaaggcc totacttca cacactctc gccatctct tcttctctga aagaagtac ctccagggtc ttgtggcatt cggatgggt tctccagcca ttttgttgc tttgtgggtc attgccagac actttctgga agatgttggg tgtgggaca tcaatgcca cgcaccatc tgggtgatca ttcgtgttcc tgtgatctc tccatctga ttaatttcat cttttcata aacattctaa gaatcctgat gaaaaactt agaacccaag aaacaagagg aatgaagtc agccattata agcgcctggc caggtccact ctctgtga tccccctt tggcatccac tacatgtct tgccttctc cccagaggac gctatggaga tccagctgtt tttgaaacta gcccttggtc cattccaggg actggtgtg gccgtctct actgcttct caatggggag gtgcagctgg aggttcagaa gaagtggcag caatggacc tccgtgagt cccactgcac cccgtggcct ccttcagcaa cagcaccaag gccagccact tggagcagag ccaggccacc tgcaggacca gcatcatctg agaggctgga gcagggtcac caacggacag agaccaagag aggtctctgc aggtcgggc actgctgtg gacagccagt ctccccagca gacacctgt gtctctctc agctgaagat gccctccc aggtcttga ctcttcgaa gggatgtgag gcaactgtgg gcaggacaag ggctgggat ttggttcgt tgcctctcg ggaagagaag ttcagggggtc ccagaaagg acagggaat aaatgggccc tgggatgaga ttc </p>	Homo sapiens
310	4321	Secretin Receptor	NP_002971.1	<p> MRPHLSPPIQ QLLLPVLLAC AAHSGALPR LCDVLQVWE EQDCLQELS REQTDLGE P QPVPGCEGW DNISCWPSV PGRWVEVECP RFLMLTSRN GSIFRNCTQD GWSETFPRN LACGVNDS SNEKRHSYLL KLVNMTVGY SSSLVMLLVA LGILCAFRL HCTRNYIHM LEVSFILRAL SNFKDAVLE SSDVTYCDP HRAGCKLMV LFQYCMANY SWLVEGLYL HTLLAISFFS ERKYLQGEVA FGWSPAFV ALWAIARHEL EDVGCWDINA NASIWIIRG PVLSILINF ILFINILRIL MRKLPTQETR GNEVSHKRL ARSTLLIPL FGIHYIVFAF SPEDAMEIQL FFELALGSFQ GLVVAVLYCF INGEVQLEVQ KKWQWHLRE FPLHPVASF NSTKASHLEQ SQGTCRTSII </p>	Homo sapiens

311	4480	Somatostatin NM_001049 Receptor Type 1	atgttcccca atggcacccg ctcctctcct tctctctctc cttagccccag cccggggcagc A tgcggggaag ggcggggcag caggggcccc ggggcccgcg ctgcggagcg catggaggag ccaggggcga atgcgtccca gaacgggacc ttgagcgagg gccaggggcag cgcctctctg atctctttca tctactccgt ggtgtgcctg gtggggctgt ttgggaaactc ttatgttcac tacgtgatcc tgcgtatgc caagatgaag acggccaaca acatctacat cctaaatctg gccattgtg atgagctget catgtcagc gtgcctctcc tagtcacctc cagcttgttg cgccactggc ccttcgggtg gctgtctgc cgcctctgc ttagcgtga cgggtcaac atgttcaaca gcattctactg tctgactgtg ctacgcgtgg accgtactgt ggcctgtgtg catcccatca aggcggcccg ctacgcggcg cccaccgtgg ccaaggtagt aaacctggc gtgtgggtgc tatcgtctgt cgtcactctg cccatcgtgg tctctctcg caccgggccc aacagcgacg gcagggtggc ttgcaacatg ctcatgccc agcccgctca acgtggctg gtgggcttcg tgtgtacac atttctcatg ggcttctgc tgcccggtgg ggtctctgc ctgtgctacg tctcatcat tgcctaatg cgcctgtgg cctcaaggc cggctggcag cagcgcaagc gctcggagcg caagatcacc ttaattgtga tgaatgtgt gatgtgttt gtcatctgct gtagccttt ctacgtgtg cagctgttta acgtgtttg tgagcaggac gacggcacgg tgaatcagct gtcggctcgc ctgggtctat ccaacagctg cgccaaaccc atcctctatg gcttctctc agacaactc agcgtctct tccaaacgat cctatgcctc agctggatgg acaacggcg ggaggagcg gtgactatt acggcacggc cctcaagagc cgtgcctaca gtgtggaaga cttccaaact gagaacctgg agtcggcg cgtctccgt aatggcacct gacgtcccg gatcacgacg cctcga	Homo sapiens
312	4480	Somatostatin NP_001040.1 Receptor Type 1	MFNGTASSP SSSPSPSPGS CGEGGSRGP GAGAAGMEE PGRNASQNT LSEGGSAAIL P ISFIYSVCL VGLCGNSMVI VILRYAKMK TATNIYILNL AIADELLMLS VPFLVSTLL RHWFPGALLC RLVLSDAVN MFTSIYCLTV LSVDRYVAV HPKAAARYRR PTAKVAVNLG VWVLSLLVIL PIVFSRTAA NSDGTVACNM LMPEPAQRWL VGFVLYTFM GFLLPVGAIC LCYVLIIAKM RMVALKAGWQ QRRSERKIT LMVMVMVVF VICWMPFYV QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGELSDF KRSFQRIICL SWMDNAEEP VDIYATAIKS RAYSVEDFQF ENLESGGVFR NGTCTSRITT L	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtgtgtgc aaccaacac tcaaacccaga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat ttgtgtgtct gcatcattgg ttgtgtggc aacacacttg tcatttatgt catcctcgc tatgccaaga tgaagacct caccacatt tacatcctca acctggccat cgcagatgag ctcttcacg tgggtctgccc ttcttggct atgcagggtg ctctgtgtcca ctggcccttt ggcaaggoca ttbgccgggt ggtcatgact gtggatggca tcaatcagtt caccagatc ttctgctga cagtcattgag catgaccca tacctggctg tggtcacccc catcaagtgc gccaaagtga ggagaccccc gacggccaag atgatcaca tggctgtgtg gggagtctct ctgctgtgca tctggcccat catgatata gtcgggctcc ggagaaacca gtgggggaga agcagctga ccatcaactg gccagtgaa tctggggctt ggtacacagg gttcatcaco tacacttca ttctgggggt cctggtaacc ctcaccatca tctgtcttg ctacctgtc attatcata aggggaagtc cctgggaatc cgagtgggct cctcgaagag gaagaagtct gagaagaagg taccccaat ggtgtccatc gtgtgtgctg tcttcactt ctgctgggctt ccttctata tattcaactg ttctccgct	Homo sapiens

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcagcccccac ccagccctt aaagcatgt ttgactttgt ggtggtcttc acctatgcta acagctgtgc caacctatc ctatgtcct tctgtctga caactcaag aagagcttc agatgtcct ctgtttggtc aggtgagcg gcacagatga tgggagcgg agtacagta agcaggacaa atccggctg aatgagacca cggagacca gaggaccctc ctcaatggag acctccaac cagtatctga 1 MDMADELFG SHWLISFPD LNSGVSTNT SNQTEPYDL TSNALTFIY FVCIIGJCG P NTLVIYVILR YAKMKTIRNI YILNLIADE LFMGLGPFLA MQVALVHWPF GKAIKRVMT VDGINQFTSI FCLTMSIDR YLAVVHPIS AKWRRPRTAK MITMAVGVSLVILPIMY AGLRSNQWR SSGTINWPE SGAWYTGFI YTFILGLVP ITIICLYLF IIKVKSIGI RVGSSKRKKS EKVVRMVS VVAVFICWL PFYFNVSS SMAISPTPAL KMFDFVVVL TYANSCANPI LYAFSLDNFK KSFQNVLCIV KVSQTDGGER SDSKQDKSRL NETTETQRTL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcattccatc atcgtgtcc acgactcag aacctgagaa tgctctctcg A gcttgcccc cagatgcaac cctgggcaac gtgtggcgg gcccaagccc ggcagggtg gccgtcagtg ggttctgat ccccttggtc taccgtgtg tgtcgtggt ggcctgctg ggtaactcgc tggatcatca tgtgtcctg cggcacacgg ccagcccttc agtcaccaac gtctacatcc tcaacctggc gctggccgac gagctcttca tctgtggct gccctctc gccgccaga acgcccgtc ctactggcc ctactgtccc tcatgtgcc cctggctatg gggttgatg gatcaacca gttcaccagc atattctgcc tgactgtcat gagctggac cgctacctg cgtgggtaca tccaccgcg tcggcccgct ggcgcacagc tcggtggcc cgaacgtca ggcggctgt gtgggtggc tcagccgtgg tgggtgtgct cgtggtggtc ttctcggag tgcgccggc catgagcacc tgccacatgc agtggccga gccggcggc gctggcgag cggcttcat catctacacg gccgactgg gcttctcgg gccgtgctg gtcatctgcc tctgtacct gctcatcgt gtgaagtg gctcagctgg gcccggtg tgggaacct cgtgcacag gcccgggcg tccgaacga ggtcacgcy catggtgtg gccgtgttg cgtcttctg gctctgctg atgcccctt acgtgctcaa catcgtcaac gtggtgtgccc cactgcccga ggagcctgcc ttcttggggc tctacttct ggtggtggc ctgccctatg caacagctg tgccaacccc atccttatg gcttctctc ctaccgctc aagcaggct tccgagggt cctgtgctg cctcccgcc gtgtgcgag ccaggagccc actgtgggc cccggagaa gactgaggag gaggatgagg aggaggagga tggggaggag agcaggagg ggggcaagg gaaggagatg aacggccggg tcagccagat cagcagcct ggcaccagc ggcaggagc gccgccagc agagtggcca gcaaggagca gacgtccta cccaagagg ctctcactgg ggagaagtc agcacatgc gcatcagcta cctgtg GNSLVIYVYL RHPASPSVN YILNLALAD ELFMGLGPFL AAQNALSYP FGSILMCLVM P 1 MDMLHPSSVS TTSEPENASS AWPPDNLGN VSAGSPAGL AVSGVLPLV YLVVGVGLL AVDGINQFTS IFCLTMSVD RYLAVVHPTR SARWRAPVA RTVSAVWVA SAVVLPVVV FSGVPRGMST CHNQWPEPAA AWRAGFIYT AALGFGPILL VICLCYLLIV VKVRSAGRV WAPSCQRRR SERRVTRMV AVVALFVLCW MPFYVLNIN VVCPLPEPA FFLYFLVVA LPYANSCANP ILYGFLSYRF KQGFRRVLR PSRRVRSQEP TVGPPXTEE EDEEEEDGE SREGGKGEM NGRVSOITQP GTSQGERPPS RVASKEQQLL PQEASTGEKS STMRIISYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens

317	4483	Somatostatin NM_001052	Receptor Type 4	atgagcgccc cctcgacgct gcccccggg ggccgaggaag ggctggggac ggctggggccc A tctgagccca atgacagtag cgtctcggg gagcgaggagg aggcgtggc ggccggcg gacggcggg cgccgggcat ggtcgctatc cagtgcattc agcgctggt gtccctggg gggctgtgg gcaacgcct ggtcatttc gtgaccttc gctacgcca gatgaagacg gctaccacca tctacctgt caactggc gtagccgag agctttcat gctgagcgtg cctctgtgg cctgtcggc cgcctggc cactggcct tgcgctcgt gctggcgc ggggtgtca ggtcgacgg cctcaacatg ttcaccagc tctctgtct cactgtgctc agcgtgacc gctacgtggc cgtggtgcac cctctggcg cgcgaccta ccggcgccc agcgtggcca agctcataa cctggggcg tggctggcat cctgttgg cactctccc atcgccatct tggcagacac cagacggct cgcgcgcc aggcgtggc ctgcaacctg cagtggcac accggcctg gtcggcagtc ttcgtggtt acatttct gctggcttc ctgctggcg tctggccat tggcctgtgc tactgtctca tctgggcaa gatggcgcc gtggcctgc ggctggctg gaagcagc aggcgtcg agaagaaat caccagcgtg gtgctgatgg tctgtgctg tctgtgctc tctgtgagc cttctcagt gttgagctg ctgaacctcg tctgaccag cctgatgac accgcaacc agtgtcct tctctcagc tatgccaaca gctggcaca cctattctc tatgcttc tctcgacaa cttcgccga tctctccagc ggttctctg cctggcgtgc tgcctcctgg aggtgctgg aggtgctgag gaggagccc tggactacta tgcactgct ctaagagca aggtggggc aggtgctatg tgccccccac taaatgcca gcaggagcc ctgcaaccag aaccgggcc caagcctc ccctcaccca ggcaccacc cttctga 318 4483 Somatostatin NP_001043.1 MSAPSTLPPG GEGGLTAWP SAANASSAPA EAEEAVAGP DARAGMVAI QCIYALVCLV P Receptor Type 4 GIVGNALVIF VILRYAKMT ATTYYLLNLA VADELFMISV PFVASSAALR HWPFGVLCR AVLSVDGLNM FTSVFCLTVL SVDRYAVVH PLRAATYRR SVAKLINLV WLASLIVTL IAIFADTRPA RGOAVANL QWHPAWSV FVYTFLLGF LLPVLAIGL YLLIVGMRA VALRAGWQR RSEKKITRL VLMVVVFL CWMPFVQL LNLVTSIDA TNHVSILIS YANSCANPIL YGFLSDNFR SFQVLCIRC CLLEGAGGAE EEPLDYATA LKSKGAGCM CPPLKQCEA LOPEGRKRI PLTRTTT 4484 Somatostatin NM_001053 Receptor Type 5 atgagcccc tgttcccaag ctccagccc agctggaag cctctcccc gggtggctgc A tctggagcgg gctgacaacg gacgtgggt ggcccgccg cctcggcagg ggccggcg gtgctgtgc cgtgtgtga cctgctgtg tgtcgcccg gctggcggg gaacagcgtg gtcatctacg tgggtctggt ccttgccaa agtagaacg tcaccaatc ctacattctc aacctggcag tggccgacgt cctgtacatg ctggggctgc cttctctggc caccgaagc ggcgctcct tctggccctt cgccccctc ctgtgcgcg tggctcatgac gctggacggc gtcaaccagt taaccagt ctctgctg acagtcatga gctgagacc ctacctggca gtggtgacc cgtgagctc ggccgctgg cgcccgccg gtgtggcca gctggcgagc ggcgggcct gggtctctg tctgtgatg tgcgtgcgc tctgtgtgtt cgcgagcgtg caggagggcg gtacctgaa gccacgtgg ccgagcccc tgggctgtg ggcgccgtc ttcatatct acacggcct gctggcttc ttcgccccg tgcgtgtcat ctgctgtgc tacctgtca tctgtgtgaa ggtgagggcg gcggcgctgc gcgtggcgtg cgtgcggcg cgctcggag ggaagtgac gcgcatggtg ttggtggtg ttgctgtgtt tgcgggatgt tggctgcct tctcacogt caacatctc aactggccg tggcctgoc ccaggagccc	Homo sapiens
319	4484	Somatostatin NM_001053	Receptor Type 5	atgagcccc tgttcccaag ctccagccc agctggaag cctctcccc gggtggctgc A tctggagcgg gctgacaacg gacgtgggt ggcccgccg cctcggcagg ggccggcg gtgctgtgc cgtgtgtga cctgctgtg tgtcgcccg gctggcggg gaacagcgtg gtcatctacg tgggtctggt ccttgccaa agtagaacg tcaccaatc ctacattctc aacctggcag tggccgacgt cctgtacatg ctggggctgc cttctctggc caccgaagc ggcgctcct tctggccctt cgccccctc ctgtgcgcg tggctcatgac gctggacggc gtcaaccagt taaccagt ctctgctg acagtcatga gctgagacc ctacctggca gtggtgacc cgtgagctc ggccgctgg cgcccgccg gtgtggcca gctggcgagc ggcgggcct gggtctctg tctgtgatg tgcgtgcgc tctgtgtgtt cgcgagcgtg caggagggcg gtacctgaa gccacgtgg ccgagcccc tgggctgtg ggcgccgtc ttcatatct acacggcct gctggcttc ttcgccccg tgcgtgtcat ctgctgtgc tacctgtca tctgtgtgaa ggtgagggcg gcggcgctgc gcgtggcgtg cgtgcggcg cgctcggag ggaagtgac gcgcatggtg ttggtggtg ttgctgtgtt tgcgggatgt tggctgcct tctcacogt caacatctc aactggccg tggcctgoc ccaggagccc	Homo sapiens

320	4484	Somatostatin NP_001044.1	321	4552	Tachykinin Receptor 1	322	4620	Human Tachykinin Receptor 1
		MEPLFPASTP SWNASSPGAA SGGGDNRTLV GPAPSAGARA VLVPVLYLLV CAAGLGGNTL P			atcttcagagc caccgcgggc agcgggggcag tgcattccaga agcgtttata ttctgagcgc A			Homo sapiens
		VIYVLRBAK MKTVTNIYIL NLAADVLYM LGLEFLATON AASFWFPGPV LCLRLVMTLDG			cagttcagct ttcaaaaaga gtgctgccc aaaaaagcct tccacctcc tgctgctttt			Homo sapiens
		VNQFTSVECL TMSVDRIA VVHPLSSARW RRPVAKLAS AAHWLSLQM SLPLVFEADV			agaaggacc ttgagcccgag gcgcagagcca caggactctg ctgcagaggg ggtgtgtga			Homo sapiens
		QEGGTCNASW PEPVGLGAV FIYTAVLGE EAPLIVICL YLLIVVKRA AGVRVGCVR			cagatagtag gctttacgct tagcttogaa atggataaag tctcccggg ggactccagac			Homo sapiens
		RSERKVRMW LVVVLVFAQC WLPEFTVNIIV NLAVALPQEP ASAGLYFFV ILSVANSCAN			ctctcccaa acatctccac taacacctcg gaacccaatc agttcgtgca accagcctgg			Homo sapiens
		PVLYGFLSDN FRQSFQKVLIC LRKSGGAKDA DATEPRPDRI RQQEATPPA HRAAANGLMQ			caaatgtcc ttctgggcagc tgcctacacg gtcattgtgg tgacctctgt ggtgggcaac			Homo sapiens
		TSKL			gtggtagtga tgtggatcat cttagccca aaaaagaatga ggacagtgac gaactatttt			Homo sapiens
					ctgggtgaacc tggccttcgc ggaggcctcc atggctgcac tcaatacagt ggtgaacttc			Homo sapiens
					acctatgctg tccacaacga atggtactac ggctgttct actgcaagtt ccacaacttc			Homo sapiens
					tttcccatcg cgcgtgtct cgcacagtac tactccatga cggctgtggc ctttgatagg			Homo sapiens
					tacatggcca tcatacatc cctccagccc cggctgtcag ccacagccac caaagtggtc			Homo sapiens
					atctgtgtca tctgggtcct ggctctcctg ctggccttcc cccagggcta ctactcaacc			Homo sapiens
					acagagacca tgcacagcag agtctgtggc atgatcgaat ggccagagca tccgaacaa			Homo sapiens
					atttatgaga aagtgtacca catctgtgtg actgtgtgta tctacttctt cccctgtctg			Homo sapiens
					gtgattggct atgcatacac cgtagtggga atcacactat ggccacagtga gatccccggg			Homo sapiens
					gactcctctg accgtacca cgaqcaagtc tctgccaagc gcaaggtggt caaaatgatg			Homo sapiens
					attgtgtgtg ttgtcacctt cgcctatctg ttgctgtcct tccacatctt cttctcctg			Homo sapiens
					ccctacatca accagatct cactctgaag agtttatcc agcaggtcta cttggccatc			Homo sapiens
					atgtggctgg ccctgagctc caccatgtac aacccatca tctactgctg cctcaatgac			Homo sapiens
					aggttccgct tgggcttcaa gcatgccttc cgggtgctgc ccttcatcag cgcggcgagc			Homo sapiens
					tatgaggggc tggaaaatgaa atccaccggg tatctccaga cccagggcag tgtgtacaaa			Homo sapiens
					gtcagccgct ttgagagccac catctccaca gtgtgtggggg cccacagagga ggagccaagag			Homo sapiens
					gacggcccca aggccacacc ctcttccctg gacctgacct ccaactgctc ttacacgaagt			Homo sapiens
					gactccaaga ccatgacaga gaggcttcagc ttctctcca atgtgtctc ctaggccaca			Homo sapiens
					gggctcttgg cagggtcagc cccactgccc ttgacctgc ctccttcat gcatggaaat			Homo sapiens
					tcccttcata tggaaaccatc agaaacacc tcacatggg acttgcaaaa aggtcagta			Homo sapiens
					tgggttaggg aaaaatttc atccttgagt caaaaaatc caattcttcc ctatctttgc			Homo sapiens
					cacctcatg ctgtgtgact caaaccaaat cactgaactt tgctgagcct gtaaaataa			Homo sapiens
					aggtcggacc agcttttctt caagagccca atgcatcca ttctcgaag tgactttggc			Homo sapiens

322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgcgag tgctcatttc aggatg	MDNVLPVDS LSPNISTNTS EPNQFQPAW QIVLWAAAYT VIVTTSVGN VVMWIIIAH P	Homo sapiens
				KRMRTVNYF LVNLAFAEAS MAAFNTVNE TYAVHNEWY GLFYCKHNF FPIAAVFASI		
				YSMTAVAFDR YMAIIHPLQ RLSATATKV ICIVWVLLAL IAPFQGYST TETMPSRVVC		
				MIWPEHENK IYKVVYHICV TWLIYELPL VIGYATVVG IFLWASEIPG DSSDRYHEQV		
				SAKRKVVRM IVVCTFAIC WLPFHIFLL PYINPDLYLK KFIQQVYLAI MWLAMSSTMY		
				NPIIYCLND RFRIGFKHAF RCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST		
				VVGAHEEPE DGPATPSSL DLTSCSSRS DSKTWTESFS FSSNVL		
323	4687	Thrombin Receptor	NM_001992	ggcggggggc gcacagagcc agagggcctt gcgagggcg gctgaggagc cgcggggagg A	ggcggggggc gcacagagcc agagggcctt gcgagggcg gctgaggagc cgcggggagg A	Homo sapiens
				ggcgcccgag cgggtccagc gcagagactc tccctgccc ctaacggccc cagacacagc	ggcgcccgag cgggtccagc gcagagactc tccctgccc ctaacggccc cagacacagc	
				cgcgccgcgc gaccgcgcc accctgatct taccgtggg caccctggcg tctgctgccc	cgcgccgcgc gaccgcgcc accctgatct taccgtggg caccctggcg tctgctgccc	
				gctcgccgag gctcgcttg accctgacat caggagagag ggtgaagcgg agcagcccca	gctcgccgag gctcgcttg accctgacat caggagagag ggtgaagcgg agcagcccca	
				ggcgggggcag cctcccgag cagcgcccg cagagcccg gacaatgggg cgcggggggc	ggcgggggcag cctcccgag cagcgcccg cagagcccg gacaatgggg cgcggggggc	
				tgctgctggg ggccgctgc ttcagctgtt gcggccgct gttgtctgcc cgcacccggg	tgctgctggg ggccgctgc ttcagctgtt gcggccgct gttgtctgcc cgcacccggg	
				ccgcgagggc agaatcaaaa gcaacaatg ccacctaga tccccggtea tttcttctca	ccgcgagggc agaatcaaaa gcaacaatg ccacctaga tccccggtea tttcttctca	
				ggaaacccaa tgataaatat gaaccatttt gggaggatga ggagaaaaat gaaagtgggt	ggaaacccaa tgataaatat gaaccatttt gggaggatga ggagaaaaat gaaagtgggt	
				taactgaata cagattagtc tccatcaata aaagcagtc tcttcaaaa caacttctcg	taactgaata cagattagtc tccatcaata aaagcagtc tcttcaaaa caacttctcg	
				cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctcttctgccc	cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctcttctgccc	
				catctgtgta caccggagt tttgtagtca gccctccact aaacatcatg gccatcgcttg	catctgtgta caccggagt tttgtagtca gccctccact aaacatcatg gccatcgcttg	
				tgcttcatct gaaatgaag gtcaagaagc cggcggtgggt gtacatgctg cacctggcca	tgcttcatct gaaatgaag gtcaagaagc cggcggtgggt gtacatgctg cacctggcca	
				cggcagatgt gctgtttgtg tctgtgtccc cctttaaagt cagctattac tttcccgcca	cggcagatgt gctgtttgtg tctgtgtccc cctttaaagt cagctattac tttcccgcca	
				gtgattggca gtttgggtct gaattgtgc gcttcgtcac tgcagcattt tactgtaaaca	gtgattggca gtttgggtct gaattgtgc gcttcgtcac tgcagcattt tactgtaaaca	
				tgtacgcctc tatctgtctc atgacagtca taagcattga cgggtttctg gctgtgggtg	tgtacgcctc tatctgtctc atgacagtca taagcattga cgggtttctg gctgtgggtg	
				atcccatgca gtcctctccc tggcgtactc tgggaaggcc ttccttccact tgtctggcca	atcccatgca gtcctctccc tggcgtactc tgggaaggcc ttccttccact tgtctggcca	
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				tccgacccac aaagtcctc ctgattggcg attactcatt cctttctcac acttccacca	tccgacccac aaagtcctc ctgattggcg attactcatt cctttctcac acttccacca	
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				aatgtcactt ctggatatag ctagggtgaca tatacactat tacatgtgtg tatatgtaga	aatgtcactt ctggatatag ctagggtgaca tatacactat tacatgtgtg tatatgtaga	

324	4687	Thrombin Receptor	NP_001983.1	<p> tgtatgcaca cacatatatt atttgcagtg cagtatagaa taggcacttt aaacactct ttccccgcac ccagcaatt atgaataaa tctctgattc catgatttaa tatgcaaaagt ctaggttggt agagtttagc cctgaacatt tcatgtgttc catcaacagt gagagactcc atagtttggt ctgtaccac ttttgcaaat aagtgtattt tgaattgttt tgacggcaag gtttaagtta ttaagaggtg agacttagta ctatctgtgc gtagaagttc tagtgttttc aattttaaac atatccaagt ttgaattcct aaattatgg aaacagatga aaagcctctg ttttgatag gttagtattt tttacatttt acacactgta cacataagcc aaactgagc ataagtcttc tagtgaatgt aggtgggctt tcagagtagg ctattcttga gagctgcag tgctcgcccc cgatggagga ctccaggcag cagacacatg caagggccat gtcagacaca gattggccag aaacttctct gctgagctc acagcagtg gactggggcc actacatttg ctccatctct ctgggattgg ctgtgaactg atcatgtta tgagaaactg gcaaaagcaga atgtgatc ctaggaggtg atgaccatga aagactctc taccatctt aaacacaag aaagaaggca tggactctg gatcccatc cactgggtg aaacacatct agtagttgtt ctgaaatgtc agttctgata tggagccacc cattatggc tgtggccact ccaatagggtg ctgaggtgac agagtggat aagacagaga cctgcccctc agagcaaaagt agatcatgca tagagtgtag ttgatgtgta ataatatgt ttcacacaaa caaggcctgt cagctaaaga agtttgaaca ttttggttac tattctgtt ggttataact taatgaaac atgcagtagc aggacatata ttttttaaaa taagtctgat ttaattgggc actatttatt tacaatgtt ttgctcaata gattgctcaa atcaggtttt cttttaagaa tcaatcatgt cagtctgctt agaaaataca gaagaaaata gaattgacat tgaattctag gaaaattatt ctataatttc cattactta agacttaag agactttaa agcattttt aactctctaa gtatcaagta tagaaaatct tcatggaatt cacaaagtaa ttggaaatt aggttgaac atatcttta tcttacgaaa aaatggttagc attttaaaca aaatagaag ttgcaaggca aatgtttatt taaaagagca ggcaggcgc ggtggtcac gctgtaatc ccagcacttt gggaggctga ggcgggtgga tcacgaggtc aggagatcga gacctcttg gtaaacacgg tgaacccgt ctctactaaa aatgcaaaa aattagccg ggcgtgtgg caggcacctg tagtcccagc tactcgggag gctgaggcag gagactggcg tgaaccagg agcggaact tgtagtgagc cgagatcgcg cactgtgct ccagctggg caacagagca agactccatc tc KNESGLTEYR IVSINKSPL QKLPALFISE SKATNATLDP RSFLLRNPD KYEFWEDEE P IMAIWFILK MKVRPAVY MLHLATADVL FSVLPFRKIS YVFGSDWOF GSELCRFVTA AFYCNMYASI LMTVISIDR FLAVVPMQS LSWRTLGRAS FTCLAIWALA IAGVPLVLK EQTIQVPLN ITTCHDVINE TLLEGYVAYY PSFSAVFFF VPLIISTVCY VSIRCLSS AVANRSKSR ALFLSAAVFC IFIICGPTN VLLIAHVSFL SHTSTTEAY FAYLLCVCS SISDCIDPLI YYASSECQR YVYSILCKE SSDPSYNSS GOLMASKMDT CSSNINNSIY KKLLT </p>	Homo sapiens
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttcaag ccaactgaaga tggaaacga gacagtcagt gaactgaacc aaacacagct A tcagccacga gcagtggtgg ccttagaata ccaggtgttc accatcttac ttgtactcat tattgtggc ctgggcattg taggcacat catggtatgc ctggttgta tgagaaccaa gcacatgag accccaca actgtacct ggtgagctg gactagctg atctcatggt cttgggtggc gcaggcctcc ccaacataac agacagatc tagggttctt ggtctatgg </p>	Homo sapiens

244/448

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	<p>ctatgttggg tgcctctgca ttaactaccc coagttatttg ggaattaatg catcctcttg tcaataaaca gcctttacca ttgagaggga catagcaatc tgcacccca tcaaaagcca gtttctctgc acattttcca gagccaaaaa gattatcatc ttgtctctgg ctttccatc tctttactgt atgctctggt tcttctgct ggaatcaatc attagcacct acaagatgc tattgtgata tctgtggtg acaagatctc caggaattac tactcaccta tttaccta ggactttggt gctttttatg ttgtgcaatc gatcctggct acgctcctct atgattcat agctagaatc cttttcttaa atcccccttc ttcagatcct aaagaaaaact tgaagacatg gaaaaatgat tcaaccatc agaacaaca tctgaatgta aatcctcta atagatgttt caacagcaca gatatctcaa ggaagcaggt caccagatg ctggcagtggt ttgtaattct gtttgccctt ttatggatgc cctacaggac tctagtgttt gtcaactcat tctctccag tcccttccaa gaaaattggt tttgtctct ttgcagaatt tgcatttato tcaacagtgc catcaaccgc gtgatttaca atctcatgct ccagaaattc cgtgcagcct tcagaaagct ctgcaactgc agcagaagc caacagagaa acctgctaac taccgtgtgg ccttaaatca cagcgtcatc aaggatcag acctttcag cacagagctt gatgatata ctgtcaactga cacttacctg tctgcacaa aagtgtcttt tgatgacacc tgccttgctt ctgaggtatc ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaagaaa ttgagaatct gtgcagtcac caacaaaagg gagaacatgg ccaatagatc tagtgaaga cagagcagat cagctcttgg caatgctcta acaaacgc</p>	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	<p>atcgaggat gctctctgc caatgattcc agcgcctgac agccaggacc ccaggcagca A gcagtgaca gcagctctgg accggcgcgc cgttagcagc tctgccgggc cgcgcgggtg atcgatgggg agcgcttgg cgggacccag cagtgagggg cgcacagccg gacgcggag gcggcgggcg ggagaccgc accagcgcag cggccctcg gcgggacgtg acgcagcgcc cggggcgcg gttgatatt tgacaaattg atctaaaatg gctgggttt tatctgaata actcactgat gccatccag aaagtgcga ccaggtgat ttgatatagt gtttgaaca aatcgacc agtgatcaa aatgattctc aactcttcta ctgaagatgg tattaaaga atccaagatg attgtccca agctggaagg cataattaca tatgtgtcat gattcctact ttatacagta tcatcttgg gttgggaata ttgggaaca ccttggtgtg gatgtcat tacttttata tgaagtga gactgtggcc agtgttttctc ttgtgaattt agcactggct gacttatgct ttttactgac ttggccacta tgggctgtct acacagctat ggaatccgc tggccctttg gcaatcacct atgtaagatt gcttcagcca cgtcagttt caacctgtac gctagtgtgt tctactcac gtgtctcagc attgatgat acctggctat tgttaccaca atgaagtccc gccttcgacg cacaaatgctt gttagccaaag tcaactgcat catcatttgg ctgctggcag gcttggccag ttggccagct ataaccatc gaaatgtatt tttcattgag aacaccaata ttacagtttg tgccttccat tatgagtcac aaattcaac ccttcogata</p>	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	MIINSSSTEDG IKRIQDDCPK AGRHNIVFVM IPTLYSIFV VGIFGNSLVV IVIYFMKLLK P TVASVFLNL ALADICFLLT LPLWAVVTAM EYRWPFNGYL CKIASASVSF NLYASVFLLT CLSIDRYLAI VHPKSRLLR TMLVAKVTCI IWLLAGLAS LPALHHRNVE FIENITNITVC AFHYESQNST LPIGLGLTKN ILGFLEPFLI ILTSYTLIWK ALKKAYEIQK NKPRNDDIFK IIMAIVLFFF FSWIPHQIFT FLDVLIQLGI IRDCRIADIV DPAIPITICI AYFNCLNPL FYGLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE acgtcccagc gtcgagaga acgagtaagc aagaattcaa agcattctgc agcctgaatt A ttgaaggagt gtgttttagc actaagcaag ctgatttatg ataactgctt taaacttcaa ttgccactac tagcaaaaac attaccagcg gcttccactt gatatttcaa tatgaaggcg aactccacc gcaacaatga gctacacttg aactgttcac agaaaccatc agataagcat ttagatgcaa ttctattctt ttactacatt atatttgtaa ttggattctt ggtcaaatatt gtcgtgggta cactgttttg ttgtcaaaaag ggtcctaaaa aggtttctag catatacatc ttcaacctcg ctgtggctga ttactcctt ttggctactc ttctctctat ggcaacctat tattcttata gatatgactg gctcttttga cctgtgatgt gcaaatgttt ttgttctttt ctaccctga acatgttttg aagcattttt ttatcaccti gcatgagtgt tgataggtac caatctgtca ttaccacctt tctgtctcaa agaagaatc cctggcaagc actttatata gttcccttg	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	ggtgctgggc tgacaaaaa tatactgggt ttctgtttc cttttctgat cattttaca agttatactc ttatttggaa ggcctaaaag aaggtttatg aaattcagaa gaacaaacca agaaatgatg atatttttaa gataattatg gcaattgtgc tttttttttt cttttcctgg attccccacc aaatattcac tttttctggat gtattgtatc aactaggcat catcgtgac tgtagaattg cagatatgtg ggacacggcc atgcctatca ccatttgtat agcttatatt aacaattgcc tgaatcctct tttttatggc ttcttgggga aaaaatttaa agatatattt ctccagcttc taaaatatat tcccacaaa gccaaatccc actcaaacct ttcaacaaaa atgagcacgc ttctctaccg cccctcagat aatgtaagct catccaccaaa gaagcctgca ccatgttttg aggttgatg acatgttca aacctgtcca taaagtaatt ttgtgaaaaga aggagcaaga gacattctct ctgcagcact tcaactacca atgagcatta gctacttttc agaattgaag gagaaaaatgc attatgttga ctgaaccgac ttttctaaag cctgaacaa aagcttttct ttcttttgc aacaagacaa agcaagcca ctttttgcat tagacagatg acggctgctc gaagaacaat gtcagaaact cgaatgattg ttgtatttga gaaattttac tgacagaaat gcaatctccc tagcctgctt ttgtcctgtt attttttatt tccacataaa ggtattttaga atatatataa tcgttagagg agcaacagga gatgagagt ccagattgtt ctgtccagtt tccaaaggcg agtaaaagtt tcgtgccggt ttccagctat tagcaactgt gctacacttg cactgtgtac tgcacatttt gtacaaagt atgctaagca gtatcgtca agttgcagat ctttttgtga aatcaacct gtgtcttata ggtttacact gccaaaaaaa tgcccgtaag atggcttatt tgtataatgg tgttactaaa gtcacatata aagttaaac tacttgtaaa ggtgctgcac tggcccaag tagtagtgct cctcagtagt attagtttga tttaatatct gagaagtgtata tatagtttgt ggtaaaaaga ttatatatca taaagtatgc cttctgtgtt aaaaaaagta tatattctac acatatatat atatgtatat ctatatctct aaactgctgt taattgatta aaactctggca agtttatatt tactttaaaa taaataaatt ttattgc	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p> ttaggtgtat ggcctgtttg tccctcattgc caacatttta ttttcgagac gtcagaacca ttgaatactt agagtgtaat gcttgcatia tggctttccc accctgagaaa tatgcccaat ggcagctgg gattgctta atgaataata tcccttggttt tattatccct ttaattattca tagcaacatg ctattttgga attagaaac acttactgga gacgaatagc tatgggaaga acaggataac ccgtgacca gtcctgaaga tggcagctgc tttgtttctg gccctcatca tttgggtcct tcccttccat gttctgacct tccctgagtc tctggcctgg atgggtgtca ttaatagctg cgaagtata gcagtcattg accctggcact tccctttgcc atcctcttgg gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttggaac cgtttccaac agaagctccg cagtgtgttt aggtttccaa ttacttggct ccaagggaag agagagagta tgtcttgccg gaaagcagt tctcttagag aaatggagac ctttgtgtct taaacggaga gcaaatgca tgtaataaac atggctactt gctttgagc tcaccagaat tatttttaag tggttttaat aaaataataa aatttccctt aatcttttct gaatcttctg aaaccaaatg taactatgtt tctgtccag tgactttcag gaatgcccac tgttttctga tatgtttgta caagatttca ttgttgagac atatttaca cctagaagta actggtgata tatctcaaat tgttaattaat aatagattgt gaataatgat ttggggattc agatttctct ttgaacatg cttgtgtttc ttatgtgggt ttatatoca tttttatcag gatttctctc tgaaccagaa ccagctcttc aactcattgc atcatttaca agacaacatt gtaagagaga tgacacttc taagttagt atattataat agatttagac tggattatc aggttttagg catatgcttc tttaaaaacg ctataaata tattctctct gcatttccat tgagtggagg tttatagtta atctataact acataattga tagggctagg aatatagat aaatcatact cctatgcttt agcttatatt tacagtata gaaagcaaga tgtactatga catagaattg caatctataa tatttgtgtg ttcactaac tctgaataag cactttttaa aaaactttct actcatttta atgattgttt aaaggtttct attttctctg atacttttt gaaatcagta aacactgtgt attgttgtaa aatgtaaaag tcaactttca cactcttgac tttttagatg tgctgctttg atataataga cattgatttg atttttata ttaatgcttt ggtcttggtt tgtttcctaa aataatcctgg tggctaaaa aaaactcttt aacttgtaat aaaccttaa ctggcctagg aaatggatc cagaatggaa ttttgtaca tggggtctgg gtgggggcaa agagaccag tcaattacat gtttgtacc aagaagaa cctgtcagg cagtacaatg tgactttgaa aataataacc gtgggggtag tttacccta tatctataa cactgtttgt tccagaatct gtatgattct atggagctat ttaaaccaa ttgcaggtct aga </p>	Homo sapiens
331	5072	Pyrimidinerg 1c Receptor P2Y4	NM_002565	<p> atggccagta cagagctctc cctgttgaga tccctaggcc tcagccagg tcctggcagc A agttaggtgg agctgagctg ttggtttgat gaggatttca agtcatcct gctgctgtg agctatgcag ttgtctttgt gctgggcttg ggcttaacg ccccaacct atggctcttc atcttccgc tccgacctg ggatgcaacg gccacctaca tgttccacct ggcattgtca </p>	Homo sapiens

332 5072 Pyrimidinerg NP_002556.1 IFRLRPWDAAT ATYNEHLALS DTLYVLSLPT LIYYAAHNH WPFGEICKE VRFIFYWNLV Homo sapiens
ic Receptor
P2Y4

gacaccttgt atgtgctgtc gctgcccacc ctcatctact attatgcagc ccacacccac
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SEVELDCWFD EDFKFIILPV SYAVVFLVL GLNAPTLWLF P
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CSVLFLTCIS VHRIGICHP LRALRWGRPR LAGLLCLAW LVVAGCLVFN LFFVTSNKG
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LRLRTIAV LTVEVCFVP FHITRIYLL ARLEADCRV LNIWVVKV TRPLASNSC
LDPVLYLLTG DKYRQLRQL CGGKQPQPT AASSIALVSL PEDSSCRWAA TPQSSCSTP
RADRL

333 5117 Vasopressin NM_000706 IFRLRPWDAAT ATYNEHLALS DTLYVLSLPT LIYYAAHNH WPFGEICKE VRFIFYWNLV Homo sapiens
V1A Receptor

taattgcttg aaggatttt tccagacagg ttggtctgaa acctttacc tattaccttc A
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A.

A

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335 5118 Vasopressin NM_000707
V1B Receptor.

Vasopressin
V1B Receptor

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336 5118 Vasopressin NP_000698.1 MDSGLWDAN PTPRGTLNAP NATTPWLGSD EELAKVEIGV LATVLVLATG GNLAVLLTLG P
 V1B Receptor QLGKRSRMH LEVLHLALTD LAVALFQVLP RSLQOPGST YLLIAAPWLL AAFSLPQVF IFSLEVIQO
 STYMLLAMTL DRYLAVCHPL TWTTLAIFVL PVTMLTACYS LICHEICKNL KVKTQAWRVG
 SGVLDCWADF GFWGPRAYL GLPSRVSSIN TISRAKIRTV KMTFVIVLAY IACMAPFFSV
 GGGWRTWDRP SPSTLAATTR TISRAKIRTV KMTFVIVLAY IACMAPFFSV
 QMWSWWDKNA PEDSTNVAF TISMLLGNIN SCNPWIMYG FNSHLPRPL RHLACGGGPQ
 PMRRRLSDG SLSRHTLL TRSSCPATLS LSLSLTISGR PRPEESPRDL ELADGEGTAE
 TIIIF

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337 5119 Vasopressin NM_000054
 V2 Receptor
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				DRQEEGNGDS	GGSFQNGHAQ	LMTDFEKD	LACRSVLNKD	IAACRTATIT	GTIKRPSLPE		
				EELKLAHAK	GPPTNENSLP	ANVSKLHLHG	SPRYPGGPLP	DFPNHSLTLK	RDKAPKSSFV		

343	5520	Brain-Specific Angiogenesis Inhibitor 2	NM_001703	<p> GGDIFKKLD SELSRAQEKALDTSYVILPTATATLRPKPK EEPKYSIHID QMPQRLIHL STAPEASLPA RSPPSRQPPS GGPPEAPPAQ PPRPPPPPP PPQQLPPPP NLEPAPPSLG DPGEPAHPG PSTGPSTKNE NVATLSVSSL ERRKSYAEL DFEKIMHTRK RHQDMFODLN RKLQHAABKD KEVLGPDSPK EKQOTPNKRP WESLRKAHGT PTWVKLELEP LQPSPLELRS VEWERSGATI PLVGQDIIDL QTEV gccgcggcggg agagcgggag cctcggccct ccgcggcggt gcagctacct accctgcgcc A cggccaggtc cccgacttag gcatggcaaa ctgggcccc gtggcgccc ccgcagcgc sapiens cggccccgc tctgtgctt gacggcgccc aggaatcca cagcagtgt acatgtgacg tcacactga cagtgcctc ctgtgggcat ggctcaggtt gtgcagatt cctggcacac tggtgtaac tccgccctt tctctcctc tcagtaaac aagattacgc ggtgacatgc ctcacagctg atcacgacac acggggatgg agacaagag ttatggagaa tacagggtgg atgggcaagg gacataggat gacccagcc cccagtcctt tactgtctgt gattctgtcc ctgcgctgg ccaccgctt gacccccgc cccagtcctt gctctgctt gctctgctt gtgctctacg gggccttct gctgcaggac ctcttctca ccatgcctc gggctgctc tggaccctgg agaaccctga cccacccaag tactcctct accctgctt caaccgcaag gagcagggtg gcgcacactt tgcctccgc ctgtgcctc tggaccacta cctggtaaac tttaccctgc tggggcctag ccccgaggag cgggtggccc agcggagtc agaggtgggg cggccagaag aggaggaggc agaggcgga cgggggttgg agctgtgcag cggctcaggc ccctttacct tctgtcact cgcacaagac tctgtcagc tgtgtctgt cggctgagcc tccgaggccc cggcctgct ggcgcctgt cccctagcct tccgttctgt cagaggtctg ctcatcaaca acacaactc tagccaattc acctgtgtg tgctctgccc ctggagtgag gagtgctggc gctgtgcgg caggcgctgc ggtgtgtc agcagggtg cagctgacct ggagaggcgg gggcggctc caccacacc acatctccag gccctctgc tggccacacc ctgtccaatg cctgtgtgc cgggggccc gccccacctg ctgaggccga ttgcaactg gggagcagca atgatctgt cacaaccgag atgagatatg gtgaggagcc ggaagaggaa ccgaaagtga aaaccagtg ccgagggtct gcagatgagc ctgggctata catggcgag acaggcgacc cggcggtga ggaagtgtcc ccgtgagcg tgtgttccct gactgtggg cagggtctgc aggtgcggac ccctcctgt gtgtctccc cctatggac cctgtgcagc gggccccgc gggagaccag gccctgcaac aattcagca cctgcccagt gcacggcgtg tgggaggagt ggggttctc ggcctgtgc tccgcagct cggggcgggg gtcccggagc cggatgcga cctgcgtgc ccccgagcac ggcggcaagg cctgcgaggg tctgagctg cagactaac tctgcagtat ggtgcctgc ccgtgtgaa ggcagtggtt agaaggggt ccctggggc catgtctcc gctctgtgc aatggaccc aacagcgag ccgaaagtgc agcgtggcgg gccagcctg ggcacatgc acgggtgccc tcaactgac ccggagtg agcaacctg agtgcggc cactgtatgc agcgtggcag cgcgcttcc catggaatgc gtggagcctg tgcttaaga cgtgtgacac aggtgggagc cgcgcttcc cactgtgcca ggcacgggc acgcagggtt accctgcga gggcccgga gaggagtga agcctttag tgagaagag tgtccagct tcatgatgt gtgcagggtt gactacgtga tctgatgac gtggaagaag gcagctgctg gcgagatcat ctacaacaag tgcctccga atgcctcagg gtctgcagc cgcgctgtc tctcagtg ccaaggcgtg gcgtactggg ggcgtgccag ctttgcctgc tgcatctccc atgagtacc ctactgtat ctgtcacta gggagcact ggcgaagggg </p>
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344	5520	Brain-Specific Angiogenesis Inhibitor 2	NP_001694.1	Homo sapiens	<p> cggccgacac ccagcgcccg ccaagtgtccc gagccagggg agcgagcgg gaccatgcct cgaccgtgc ccggtctctac catgaagatg ggctccctgg agcgaaagaa attacgggtat tcagacctgg actttgaggt gatgcacacc cggaacggc attcagaact ctaccacgag ctcaaccaga agttccacac ttctgaccgc taccgagcc agtccacggc caagagggag aagcggtgga gtgtgtctc gggtggggcg ccgagagga gggtgtgca cgaataagccc agcctgggg agcgcccccag cttgtcccaa catcgggccg atcagagctg gagcaccttc aatctatga cactgggtc gctgcccc aagccccg aacggctgac tctgacccg gagcagcct ggagccccac agaaccacg gatgtgact tcagacaga ggtgtgagt ccacgctgga ctgcccactg catataata tatatatct tctattttca cactccactt tggaactacc caggagccag cgccctctcc cdtctccga gggtgggca ggagggccg gtgactcag ccaggtggg gagccggac atggctggc ctgggggtccc agggcccttc ctgtttctc agagccctc gagccactg aacccatct taagccacg cgtccctcc ctgtcccggg ctggggagg ggaggggaa cttgttggg aataaactc actctgtgg DTPKSLYL VILSLRLATA FDPAPSAACSA LASGLVYCAF SLQDLFPRIA SGCSTLENP P AEAAAGLELC SGSPFTFLH FDKNFVQLCL SAEPSEAPRL LAPAALAFR FEVLINNN SSQFTCGVLC RMSECGRAA GRACGGAQPG CSCPGEAGAG STTTSPGP AAHTLSNALV PGGPAPAEA DLHSGSSNDL FTTEMRYGEE PEEEPKVKTQ WPSADEPGL YMAQTGDPA EWSWPSVCS LTCGGLQVR TRSCVSSPYG TLCSPGURET RPCNNSATCP VHGWEWGS WSLCSRSCGR GSRSMRTCV PPQHGKACE GPELOTKLS MAACPVEGW LEWGPWGPCS TSCANGTQR SRKCSVAGPA WATCTGALTD TRECSNLECP ATDSKWGPWN AWSLCKTCD TGWRFRMC QATGTQGYPC EGTGEVVKPC SEKRCPAFHE MCRDEYVLM TWKAAAGEI IYNKCPNAS GSARRCLS AQGVAYWGLP SFARCISHEY RYIYLSLREH LAKQRMLAG EGMSQVRSIL QELLARTTY SCDLFSVDI LRNVDTFKR ATVPSADDV QRFQVVSFM VDAENKEKWD DAQVSPGSV HLLRVVEDFI HLVDALKAF QSLIVTDNL VISIQREPVS AVSSDITFEM RRRGMKDW RHSEDRLEFL KEVLSLSPG KATSGAAGS PGRGPGGT PPGPHSHOR LLPADPDESS YFVIGAVLYR TLGLILPPR PFIATSRVM TVTVRPPTQP PAEPLITVEL SYIINGTDP HCASWDYSRA DASSGDWDE NCOTLETQAA HTRCQCQHL TFVLAQPPK DLTLELAGSP SVPLVIGCAV SCMLLTILA IYAAFWRFTK SERSIILLNF CLSLASNL ILVQSRVLS KGVCTMTAAE LHFFLSFC WVITEAWQSY PAAVIVLNM LVRKRELCIG WGLPALWAV SVGFTRTKY GTSSYCWLSL EGGLLYAFVG PAAVIVLNM LIGIIVFNKL MARDGISDKS KKQAGSERC PWASLLIPCS ACGAVPSPLL SSASARNAMA SLWSSCVVLP LLALTWMSAV LAMTDRSVL FOALFAVENS AQGFVITAVH CFLREVQDV VKQMGVRA DESDSPSC KNGQLILSD FEKVDILACQ TVLFKEVNTC NPSTITGTL RLSLDEDEEP KSLVGPES LSFLPLPNI LVPMAASPGI GEPPPQEAN PVMCGEGGL RQDLTLWRP TEPGEGDYM VLPRTLSLQ PGGGGGGED APRARPESTP RRAKTVAHT EGYPSFLVD HSGLGLPAY GSLQNPYMT FQPPPTPSA QVPEPERS RTMPTVPGS TMKMSLERK KLRYSDLDLFE VMHTRKHE LYHELMQKHF TFDYRSQST AKREKRSVS SGGAAERSVC TDKPSPGERP SLQHRHQS WSTFKSMTLG SLPPKPREL TLHRAAWEP TEPPDGFQT EV </p>
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345	5521	Brain- Specific Angiogenesis Inhibitor 3	NM_001704	gataaacaac ttacagaggg caaatgacat aggatgaagg ctgttcgttaa cctgctgatt A tataatttt ccactatct cctggttatg ttggattta atctgccc agactcttg tttcaactt tggtaagg agtcatttat ggtcgtctt ctgtaagtga aatgttctt aaaaacttta caaactgcac ttggacgtg gaaatccag atccaacca atatagcatt tacotgaaat ttccaataa ggacctagc tgctctaact ttcaactct gcttatcag ttgatcatt ttcccatga aaaaataag gatctttta gataaataa ttctataatg caactctgca attccaagaa tgcttctgt ttctacagt atgataaaaa ttbtattcaa atacgtcgag tattccaac taatttccca ggattacaga aaaaaggga agaagatcag aaatctttt ttgattttt ggtattgaac aggtcagcc caagccagtt tgggtgccat gtattatgta ctgtgttga gagctgctta aaatcagaaa atgggagaa agaactatgt gggatcagt atacaaaatg cactgcctt cagcatttgg gagagtggg gatcgacgac cagtcgctga ttttgttaa taactgtgtg ttacccctga atgagcagac agagggtgc ctgaccagg agctgcaaac caccagtc tgcaatctta ccaggaggcc caagcgacca ccaaaagaag aatttgaat gatggagat catacaatta aaagtcagc acctgatct gttcataaaa aaaggtctcc tcaggacaaa gctgatgtg cttaatttat ggcacaaact ggtgaatctg gtgtggaaga gtgttccag tggagacat gtctgggttac ttgtgtcaa gggtcgagg tgcgaaccag aacttgtta tcaacttac ggacacactg cagcgccca ttaagagaat caaggtttg caataacat gcctctgtc cagtacacgg agtatgggag gaatggtc acatgagttt atgttcatit acatgtgtc gagccaaaag acaagaaca aggtcatgca cactctcta gtatggagg aggcgtgtg aaggacctga acacatcat aagccttga atattgctct ttgceagtt gatggacagt ggcaagagt gattcgtg agccagtgt cagtaacgtg ctgaatggg actcagcaga gaagccgga gtgcaactga gtgccccatg gaggctcca atgcagagg ccatgggag aagcagaga gtgtataaac cctgaatga cagccaatg tcaatggaat cagtgggtc atgtgagtg ttgttccaa tcctgtgtg cggctggga aggcgaata aggacctgtc aggtgcagt gataacagg cagcaatgt aggaacggg cgaagagtg agaagatga gtgagcagc atgccctga ccttatgaaa tatgcctga gatttatct atgtcagtg ttgggaaaag aactccagca ggcgacttg cattcaatca atgtccctg aatgccacag gcaccactag cagacgtgc tctctcagtc ttcatggagt ggccttctg gaacagcga gcttgcaag atgcataatca aatgagtaca gacacttga gcatcaatt aaagagcacc ttgtaaggg gcagcgaatg ctggcagggt atggaatgt ccaggtgacc aagacactgt tggatttaac tcagagaaaa aatctctatg caggcgatct tctgatgtct gtggagatcc tgagaaatgt gacagacaca tttaaaaggg caagtacat cctgcatct gatgtgtcc agaacttct tcaaatagt agcaacctc tagatgaaga aacaaggaa aaatgggag atgcacaaca gattatcca gggtcaatag agttaatga ggtgattga gatittatc acattgttg aatgggagt atggacttcc agaatcata cttaagtact ggaaatgtag tggctagtat tcagaagctt cctgcagcct ctgttctaac agacataac ttccaatga aaggacggaa gggaaatggt gactgggcaa gaaactcaga agatagggtg gtaattccaa aaagcatttt cactccgtg tcatacaaaa aattagatga atcatctga ttgttcttg gcagctcct atcaaaaaac ttagatctaa ttttggccac tttagaagaat tatactgtca ttaattccaa aatcactgt gtcaataaa ggcctgaacc caaaacaacc gattcgttct tgagagataga actagctcat	Homo sapiens
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346	5521	Brain-Specific Angiogenesis Inhibitor 3	NP_001695.1	<p> aagcacaatg tatatatta tgcagttttt aaagtttata acagttctgtt tggccattac tacaactttt actttataat ataaaagcaa agtttttgc ataaatgaa tgtttgttga gctacattct tcattgcttt aatgaataa agtaataat ctacatttta tatgaataat atattcaca tctttattat tgcagttttc tctagaaagc tctgagaagc tttctctgct gcagctgtgt ataaaatatt taaaatgttg tatggtgtaa ataaactttt gctacat gcaatggtgt ifstyllvmf GENAAQDFWC STLKGVIG SYSVSEMFK NFNCTWTLE P MKAVERNLLIY IFSTYLLVMF GENAAQDFWC STLKGVIG SYSVSEMFK NFNCTWTLE P NPDTKYSIY LKFSKDLSC SNFSLAYQF DHFSHEKID LLRNHSHIMQ LCNSKNAFVF LOYDNFIQI RRVFTNFPQ LQKGEEDQK SFEEFLVNLK VSPSQFGCHV LCTWIESCLK SENGRTESC IMYTKCTCPQ HLGEMGIDDQ SLILLNNVL PLNEQTEGCL TQELQTTQVC NLTRAKRPP KEFGWMDH TIKSQRPVS HEKRVQQA DAAKFAQTG ESVGVEWSQW STCSVTCQG SQVPTCVS PYGTHCSGPL RESRVCNNTA LCPVHGWEW WSPWLSLCSFT CGRQRTTR SCTPQYGR PCEGPTHK PCNIALCPVD GQWQWSSWS QCSVTCNSGT QORSROCTAA AHGSECRGP WAESRECNYP ECTANGQWQ WGHWSGCSKS CDGWERRIR TCQAVITGQ QCEGTGEVR RCSEQRCAP YEICPEDYLM SMVWKRTAG DLAENQCPLN ATGTSRRCS LSLHGVAWE QPSEFARCSN EYRHLQHSIK EHLAKQRM LAGDMSQVTK TLDLTQRKN FYAGLLMSV EILRNVTDTF KRASYIPASD GVONFFQIVS NLLDEENKEK WEDAQQIYPG SIELMQVIED FIHIVGMGM DFQNSYLTG NVVASIQKLP AASVLTIDNF PMKRGKGMVD WARNSEDRV IPKSIPTVS SKELDESSVF VLGAVALYKML DLILPTLRNY TVNSKIIV TIRPEKTTD SFLEIELAHL ANGLNTPYCV LWDSTKSNES LGTWTQGCK TVLTDASHTK CLCDRLSTFA ILAQPREII MESSGTPSVT LIVSGLSCL ALITLAVVYA ALWYIRSER SIILINECLS IISSNILLV GQTQTHKSI CTTTAFLEHF FFLASFCWVL TEAWQSYNAV TGKIRTLIR KRFLCLGWL PALVAVATSVG FTRTKGYGT HYCWLSEGG LLYAFVGPAA AVLVMNVIG ILVFNKLVSR DGLDKKLKH RAGOMSEPHS GLTLKCAKCG VWSTALSAT TASNAMSILW SSCWVLPILA LTWMSAVLAM TDKRSILFOI LFAVFDLSQG FVIWMVHCIL RREVQDAFRC RLNCQDPIN ADSSSFPNG HAQIMTDFEK DVDIACRSVL HKDIGPCRAA TITGTLRSIS LNDDEEKG T NPEGLSYSTL PGNVISKVII QOPTGLHMPM SMNELSNPCL KKNSELRLT VYLCTDDNLR GADMDIVHPQ ERMESDYIV MPRSSVNNQP SMKEESKNI GMETLPHERL LHYKVNPEFN MNPPVMDQFN MNLEQHLAPQ EHMQNLPFEP RTAVKNEMAS ELDDNAGLSR SETGSTISMS SLERRKRSYS DLDFEKVMT RKRHMELEFQE LNQEFQTLDR FRDIPTSSM ENPAPNKNPW DTFKNPSEYP HYTTINVLDT EAKDALELRP AEWEKCLNLP LDVQEGDFQT EV gcagaccttg ctctcatgagc aagctcatct ctggaacaaa ctggcaaaagc atctctgctg A gtgttcatac gaacagacac catggcagag catgattacc atgaagacta tgggttcagc agtttcaatg acagagacca ggaggagcat caagacttcc tgcagttcag caaggtcttt ctgcccctga tgtacctggt ggtgttctgc tgtgttctgc tggggaaact tctgtgctg gtcatatcca tcttctacca taagtgcag agcctgacgg atgtgttctc ggtgaacct ccctggctg acctggtgt tgtctgact ctgcccctc gggcctatgc aggcacatc gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcatctacac tattaactc tacaggtcca tgcctatcct cactgcac actgtggatc gtttcatgt agtggttaag gccaccaagg cctacaacca gcaagccaag aggatgacct ggggcaaggt caccagcttg ctcatctggg tgatatccct gctggttctc ttgccccaaa ttatctatgg caatgtcttt </p>	Homo sapiens
347	6031	SIV/HIV Receptor BONZO	NM_006564	<p> aagcacaatg tatatatta tgcagttttt aaagtttata acagttctgtt tggccattac tacaactttt actttataat ataaaagcaa agtttttgc ataaatgaa tgtttgttga gctacattct tcattgcttt aatgaataa agtaataat ctacatttta tatgaataat atattcaca tctttattat tgcagttttc tctagaaagc tctgagaagc tttctctgct gcagctgtgt ataaaatatt taaaatgttg tatggtgtaa ataaactttt gctacat gcaatggtgt ifstyllvmf GENAAQDFWC STLKGVIG SYSVSEMFK NFNCTWTLE P MKAVERNLLIY IFSTYLLVMF GENAAQDFWC STLKGVIG SYSVSEMFK NFNCTWTLE P NPDTKYSIY LKFSKDLSC SNFSLAYQF DHFSHEKID LLRNHSHIMQ LCNSKNAFVF LOYDNFIQI RRVFTNFPQ LQKGEEDQK SFEEFLVNLK VSPSQFGCHV LCTWIESCLK SENGRTESC IMYTKCTCPQ HLGEMGIDDQ SLILLNNVL PLNEQTEGCL TQELQTTQVC NLTRAKRPP KEFGWMDH TIKSQRPVS HEKRVQQA DAAKFAQTG ESVGVEWSQW STCSVTCQG SQVPTCVS PYGTHCSGPL RESRVCNNTA LCPVHGWEW WSPWLSLCSFT CGRQRTTR SCTPQYGR PCEGPTHK PCNIALCPVD GQWQWSSWS QCSVTCNSGT QORSROCTAA AHGSECRGP WAESRECNYP ECTANGQWQ WGHWSGCSKS CDGWERRIR TCQAVITGQ QCEGTGEVR RCSEQRCAP YEICPEDYLM SMVWKRTAG DLAENQCPLN ATGTSRRCS LSLHGVAWE QPSEFARCSN EYRHLQHSIK EHLAKQRM LAGDMSQVTK TLDLTQRKN FYAGLLMSV EILRNVTDTF KRASYIPASD GVONFFQIVS NLLDEENKEK WEDAQQIYPG SIELMQVIED FIHIVGMGM DFQNSYLTG NVVASIQKLP AASVLTIDNF PMKRGKGMVD WARNSEDRV IPKSIPTVS SKELDESSVF VLGAVALYKML DLILPTLRNY TVNSKIIV TIRPEKTTD SFLEIELAHL ANGLNTPYCV LWDSTKSNES LGTWTQGCK TVLTDASHTK CLCDRLSTFA ILAQPREII MESSGTPSVT LIVSGLSCL ALITLAVVYA ALWYIRSER SIILINECLS IISSNILLV GQTQTHKSI CTTTAFLEHF FFLASFCWVL TEAWQSYNAV TGKIRTLIR KRFLCLGWL PALVAVATSVG FTRTKGYGT HYCWLSEGG LLYAFVGPAA AVLVMNVIG ILVFNKLVSR DGLDKKLKH RAGOMSEPHS GLTLKCAKCG VWSTALSAT TASNAMSILW SSCWVLPILA LTWMSAVLAM TDKRSILFOI LFAVFDLSQG FVIWMVHCIL RREVQDAFRC RLNCQDPIN ADSSSFPNG HAQIMTDFEK DVDIACRSVL HKDIGPCRAA TITGTLRSIS LNDDEEKG T NPEGLSYSTL PGNVISKVII QOPTGLHMPM SMNELSNPCL KKNSELRLT VYLCTDDNLR GADMDIVHPQ ERMESDYIV MPRSSVNNQP SMKEESKNI GMETLPHERL LHYKVNPEFN MNPPVMDQFN MNLEQHLAPQ EHMQNLPFEP RTAVKNEMAS ELDDNAGLSR SETGSTISMS SLERRKRSYS DLDFEKVMT RKRHMELEFQE LNQEFQTLDR FRDIPTSSM ENPAPNKNPW DTFKNPSEYP HYTTINVLDT EAKDALELRP AEWEKCLNLP LDVQEGDFQT EV gcagaccttg ctctcatgagc aagctcatct ctggaacaaa ctggcaaaagc atctctgctg A gtgttcatac gaacagacac catggcagag catgattacc atgaagacta tgggttcagc agtttcaatg acagagacca ggaggagcat caagacttcc tgcagttcag caaggtcttt ctgcccctga tgtacctggt ggtgttctgc tgtgttctgc tggggaaact tctgtgctg gtcatatcca tcttctacca taagtgcag agcctgacgg atgtgttctc ggtgaacct ccctggctg acctggtgt tgtctgact ctgcccctc gggcctatgc aggcacatc gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcatctacac tattaactc tacaggtcca tgcctatcct cactgcac actgtggatc gtttcatgt agtggttaag gccaccaagg cctacaacca gcaagccaag aggatgacct ggggcaaggt caccagcttg ctcatctggg tgatatccct gctggttctc ttgccccaaa ttatctatgg caatgtcttt </p>	Homo sapiens

348	6031	SIV/HIV Receptor BONZO	NP_006555.1	MAEHYHEDY GFSSNDSSQ EEHQDFIQFS KVELPCMYLV VFVCGLVGNS LVLVISIFYH P KLQSLTDVFL VNLPLADLVE VCTLPTWYAY GIHEWVFGQV MCKSLLGIVT INFYTSMLIL TCITVDRFIV VKATKAYNQ QAKRMTWGV TSLLIWIWISL IVSLPQIIYG NVFNLDKLLC GXHDEAISTV VLATQMTLGE FLPLTMIVC YSVLIKTLIH AGGFQKHRSI KIIFLVMAVF LLTQMPFNLM KFIRSTHWEY YAMTSFHYTI MVTEAIAYLR ACINPVLVAF VSLKFRKNFW KLVKDIGCLP YLGVSHQWKS SEDNSKTFSA SHNVEATSMF QL	Homo sapiens
349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	gcccagatgg tcatcatggg ccagtgcctac tacaacaga caatcggtt cttctataac A aacagtggca aagagctcag ctcccaactgg cggcccaagg atgtgggtcgt ggtggcactg gggtgaccg tcaggtgctg ggtgctgctg accaatctgc tggatcatag agccatcgcc tcaaaccgc gcttcacca gccatctac tactgtctc gcaatctggc cgcggctgac ctcttcggg ggtggccta cctctctctc atgttcaaca ctgggtcccg cacagccga ctttcacttg agggctggtt cctgcggcag ggttgcgtgg acacaagcct cactgcgtg gtggccacac tgcctggccat cgcctggag cggcacccga gtgtgatggc cgtgcagctg cacagccgc tgcctcgctgg ccgcgtgggtc atgtcaattg tggcgctgtg ggtggctgac ctgggacctg gctgctgccc tgcacactcc tggcactgcc tctgtgacct ggaccgtgc tcacgcatgg caccctgct cagccgctcc tatttggcgg tctgggctct gtcgagcctg ctgtcttcc tgcctatggt ggtgtgtac acccgcatct tcttctacgt gggcgcgga gtgcagcgca tggcagagca tgtcagctgc caccctgct accgagagac cagctcagc	Homo sapiens

350	6204	Lysophosphat NP_004711.2 idic Acid Receptor Edg4	cttcagatag attatattctg gactgaagga tcttgccacc tacgtatctg gcatagtatt A ctgtgtagtg ggaatgagcag agagaacaaaa caaataataatc cagtggagaaa agcccgtaaaa taaaccttcca gaccagagat ctattctcca gcttatitta agctcaactt aaaaaagaaa actgttctct gattcttttc gcttcaata cacttaataga tttaaactcca cctccttcca aaagaacacg catttctctac ttttatactg tctatatgat tgatttgcac agctcatctg gccagaagag ctgagacatc cgttccccca caagaaactc tcccggggtg gaacaagatg gattatcaag tgtcaagtcc aatctatgac atcaattatt atacatcgga gccctgccaa aaaatcaatg tgaagcaaat cgcagccgc ctcctggctc cgtctactc actggtgttc atctttggtt ttgtgggcaa catgctgttc atctcatcc tgataaactg caaaaggctg aagagcatga ctgacatcta cctgctcaac ctggccatct ctgacgtgtt tttccttctt actgtccctt tctgggctca ctatgctgc gccagtggtg actttggaaa tacaatgtgt caactcttga cagggtctta ttttataggc tctctctctg gaatcttctt catcatctctc ctgacaatcg ataggtaact ggctgtctgc catgctgtgt ttgctttaa agccaggacg gtcacctttg ggtgtgtgac aagtgtgac acttgggtg tggctgtgtt tgcgtctctc ccaggaatca tctttaccag atctcaaaa gaaggtcttc attacacctg cagctctcat tttccataga gtcagatca attctggaag aattccaga cattaaagat agtcatcttg ggcctggttc tgcctgtgtt tgtcatgttc atctgtact cgggaatcct aaaaactctg cttcggtgtc gaaatgagaa gaagaggcac aggtgtgtga ggttatctt caccatcatg attgtttatt tctctctctg ggtccctac aacattgttc ttctctgaa caccttceag gaattctttg gctgaataa tgcagtagc tctaacaggt tggaccaagc tatgcaggtg acagagactc ttgggatgac gcactgtgc atcaaccca tcatctatgc ctttgcggg gagaagtcca gaaactacct cttagtcttc tccaacaa acattgccaa acgttctgc aaatgtgtt ctatttcca gcaagaggct ccgagcgag caagctcagt ttacaccga tccactggg agcaggaat atctgtgggc ttgtgacac gactcaagt ggctgggtgac ccagtcagag ttgtgacat ggttagttt tcatcacag cctgggtg ggttgggtg ggagaggtct tttttaaag gaagtactg ttatagagg tctaagattc atccattat ttggcatctg tttaaagtag attagatctt ttaagccat caattataga aagcaaatc	Homo sapiens
351	6213	C-C Chemokine Receptor 5	cttcagatag attatattctg gactgaagga tcttgccacc tacgtatctg gcatagtatt A ctgtgtagtg ggaatgagcag agagaacaaaa caaataataatc cagtggagaaa agcccgtaaaa taaaccttcca gaccagagat ctattctcca gcttatitta agctcaactt aaaaaagaaa actgttctct gattcttttc gcttcaata cacttaataga tttaaactcca cctccttcca aaagaacacg catttctctac ttttatactg tctatatgat tgatttgcac agctcatctg gccagaagag ctgagacatc cgttccccca caagaaactc tcccggggtg gaacaagatg gattatcaag tgtcaagtcc aatctatgac atcaattatt atacatcgga gccctgccaa aaaatcaatg tgaagcaaat cgcagccgc ctcctggctc cgtctactc actggtgttc atctttggtt ttgtgggcaa catgctgttc atctcatcc tgataaactg caaaaggctg aagagcatga ctgacatcta cctgctcaac ctggccatct ctgacgtgtt tttccttctt actgtccctt tctgggctca ctatgctgc gccagtggtg actttggaaa tacaatgtgt caactcttga cagggtctta ttttataggc tctctctctg gaatcttctt catcatctctc ctgacaatcg ataggtaact ggctgtctgc catgctgtgt ttgctttaa agccaggacg gtcacctttg ggtgtgtgac aagtgtgac acttgggtg tggctgtgtt tgcgtctctc ccaggaatca tctttaccag atctcaaaa gaaggtcttc attacacctg cagctctcat tttccataga gtcagatca attctggaag aattccaga cattaaagat agtcatcttg ggcctggttc tgcctgtgtt tgtcatgttc atctgtact cgggaatcct aaaaactctg cttcggtgtc gaaatgagaa gaagaggcac aggtgtgtga ggttatctt caccatcatg attgtttatt tctctctctg ggtccctac aacattgttc ttctctgaa caccttceag gaattctttg gctgaataa tgcagtagc tctaacaggt tggaccaagc tatgcaggtg acagagactc ttgggatgac gcactgtgc atcaaccca tcatctatgc ctttgcggg gagaagtcca gaaactacct cttagtcttc tccaacaa acattgccaa acgttctgc aaatgtgtt ctatttcca gcaagaggct ccgagcgag caagctcagt ttacaccga tccactggg agcaggaat atctgtgggc ttgtgacac gactcaagt ggctgggtgac ccagtcagag ttgtgacat ggttagttt tcatcacag cctgggtg ggttgggtg ggagaggtct tttttaaag gaagtactg ttatagagg tctaagattc atccattat ttggcatctg tttaaagtag attagatctt ttaagccat caattataga aagcaaatc	Homo sapiens

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 attgtctgatt cttaggttta gtgacttgaa cagaataatc aattattatt cagaattgta
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 tgaagttac aaatgcttg aaagaaata tgcattcaat aaaaacacc ttcta
 MDYQVSSPIY DINYTSEPC QKINVKQIAA RLPPLYSLV FIFGVGNML VILILNCKR P
 LKSTDIYLL NLAISDLFFL LTVFVAHYA AAQWDFNTM CQLTGLYFI GFFSGIFFII
 LITIDRYLAV VHAFAKAR TVTFGVTVSV ITWVAVFAS LPGIFTRSQ KEGLHYTCSS
 HFPYSQYQFW KNFQILKIVI IGLVPLIWM VICYSGLIKT LLRCRNEKKR HRAVLIFTI
 MIVYFLWAP YNIVLLNTF QEFFGLNCS SSNRIDQAMQ VTETIGMTHC CINPIYAFV
 GEKFNLYLV FFOKHIAKRF CKCCSIFQOE APERASSVYT RSTGEQEISV GL

Homo sapiens

NP_000570.1

C-C Chemokine Receptor_5

6213

352

353	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NM_003965	tctgtgctgt gggagtggtg cacacgttaa agaaatgtt tatttcagtc ttctgaata A gggaattact ctggttaaaa tgtagctcca gaaagggaag gtggggctgt atgaatccag gtccagtttg ttgtttcttc caggataagg cagctgtcgg aggggaaaaat catctcccat ttctccaag ggcagctcga agatggcaa ttaacagctg gcaccagagg atgaatatga tgtctcata gaagtgaac tggagagcga tgaaggcagc caatgtgaca agtatgacgc ccaggcactc tcagccagc tgggtgcac acctgtcct gctgtgtttg tgatcggtgt ccggacaat ctctgtgttg tgcttatct ggtaaaaat aaagactca aacgggtgga aaatctctat ctctaaact tggcagtttc taactgtgt ttcttgctta ccttgcctt ctgggtctat gctgggggg atcccatgtg taaaatttc attgactgt acttctgtgg cctgtacagt gagacatttt tcaattgct tctgactgtg caaagggtacc tagtgtttt gcacaaggc aactttttt cagccagag gaggtgccc tgtggcatca ttacaagtgt cctggcatgg gtaacagcca ttctggcac ttctgcaga taogtggttt ataaactca gatggaagac cagaaatata agtgtgcatt tagcagaact ccttctctgc cagctgatga gacattctgg aagcattttc tgactttaaa aatgaacatt tgggttcttg tctccccct atttattttt acattctct atgtgcaaat gaaaaaaca ctaaggttca gggagcagag gtatagcctt ttcaagcttg tttttgccat aatggtagtc tctctctga tggggcgcc ctacaattt gcatttttc tgtccactt caaagaacac ttctccctga gtgactgcaa gagcagctac aatctggaca aaagtgttca catcactaaa ctcatcgcca ccaccactg ctgcatcaac cctctctgt atgctttct tgatgggaca tttagcaaat acctctgccg ctgtttccat ctgcttagta acacccact tcaacccagg ggcagctctg cacaaggcac atcgagggaa gaacctgacc attccaccga agtgtaaat agcatccacc aaatgcaaga agaataaaca tggattttca tctttctgca ttatttctat taaattttct acacattgt atacaaaatc ggatacagga agaaaaggga ggggtgagct acattttgt aagcactgaa tttgtctcag gcacgtgca agctcttta caaacgtgag ctctctgcc tctaccact tgtccatagt gtggatagga ctagtctcat ttctctgaga agaaaactaa ggcgggaaa tttgtctaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt tgctcagagc ctacgttgg tccagaacat caaactcaa acctgggga caaacgacat gaaataaatg tatttaaaa catct	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NP_003956.1	MANXTLAPED EYDVLEI GEL ESDEREQCDK YDAQLSAQL VPSLCSAVFV IGVLDNLLV P LILVKYKGLK RVENIYLNL AVSNLCFLT LPFWAHAGD PMKILIGLY FVGLYSETFF NCLLTVQRYL VFLHKNFFS ARRVPCGII TSVLAWVTAI LATLPEYVYV KPQMEDQYK CAFSTRPFLP ADETWKHFL TLKMNISVLV LPLFIFFLY VQMRKTLRFR EQRYSLFKLV FAIMVFLM WAPYNIAFL STFKHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY AFLDGTFESKY LRCFHILRN TPLQPRGQSA QGTSREEDPH STEV	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	atggagagccc cgggcgcgt tctcgccgc agtgcgcgc tactgcttct gctactgctc A aaggtgtctg cctctctgc cctcggttc gccctgcgt ccagaaaaga aactgtctg gggagagct gtgaactac agtgcacag cgcgcgcga gggagcctg gggacggga aattctgcaa gagacgttct gcgagccga gaacccaggg aggagcaggg ggcagcgttt cttgccgggac cctctctgga cctgcgcgc gccccgggc gtgacccgc tgcagcaga ggggcggagg cgtcgccagc cggaccccg ggacctcaa ccaggccacc tggcccttg aggtggaaa gtcctcgggg tcaggagcct tctgaactt tggggagagg gaacccacg	Homo sapiens

356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gcctccagc tcttcttca gatctcagag gaggaagaga aggttcccag aggcgtggc atttccggc gtagccagg gacagtggtg aagacagtc cggagccag cgtattttt tactggccaa ggagagccgg gaaactccag ggttcccacc acaagccct gtccaagacg gcaatggac tgggggggca cgaaggtgg acaattgcac tccggggcgg ggcgtggcc cagatggat ccttgggtga agaatccat gagcctggg gtcccggcg gggaacagc acgaaccggc gtgtgagct gaagaaccc ttctacccgc tgaccaggga gtccatagg gcctacggcg tcatgtgtct gtccgtggtg atcttcggga cggcatcat tggcaacctg gggtgatgt gcategtgtg ccacaactac tacatgggga gcatctcaa ctcctcttg gccaacctgg ccttctggga ctttctcacc gacttctcct gcaagatcgt gctcatctt cacgagctga ccaagaagt gctgctggag gacttctcct gcaagatcgt gctcatata gaggtcgctt cctggggagt caccacctc accattatgt cctgtgcat agaccgttc cgtgctgcca ccaacgtaca gatgtactac gaaatgatg aaaactgttc ctcaacaact gcaaaacttg ctgttatatg ggtggggagt ctattgttag cactccaga agttgttctc cgccagctga gaaaggagga ttgggggttt agtggccgag ctcgggcaga aagtgcat attaagatct cctcgtattt accagacacc atctatgttc tagcctcacc ctacgacagt gcgagactgt ggtgggtatt tggctgttac ttgtgtttgc ccacgtttt caccatcacc tgctctctag tgactgcgag gaaaatccgc aaagcagaga agcctgtac ccgagggaat aaacggcaga tcaactaga gactcagatg aactgtacag tagtggcact gaccatttta tatggatttt gcattattcc tgaataatc tgcaacatc ttactgccta catggtaca gggttttcac agcagacaat ggacctcctt aatcatcata gccagttcct ttgttctttt aagtcctgtg tcacccagct cctccttttc tgtctctgga aaccttcag tcgggcttc atggagtgct gctgtgtgtg ctgtgaggaa tgcatcaga agtcttaac ggtgaccagt gatgacaatg acaacagta caccacggaa ctggaactct gctcttcag taccatacgc cgtgaaatgt ccactttgc tctgtcga actcattgct ga</p>	Homo sapiens
357	6536	Putative Neurotransm tter Receptor (PNR)	NM_003967	<p>atgagagctg tcttcacca aggtgtgaa gacacacctg cggcattctg ctaccaggtg A aatgggtctt gcccaggac agtaatact ctgggcaccc agtgggtcat ctacctgacc tgtgcagcag ccatgtgat tatcgtgcta gggaatgat ttgtggcatt tgcgtgtcc tacttcaaag cgcttcacac gccaccaaac ttctgtcgc tctcctggc cctggctgac atgtttctgg gctgtgtgtt gctgcccctc agcaccattc gtcagtgga gagctgtg ttcttcgggg acttctctg ccgctctgac acctacttg aacctctt ctgctcacc</p>	Homo sapiens

Accession	Gene	Protein	Species	Sequence
358	6536	Putative Neurotransmitter Receptor (ENR)	Homo sapiens	<p>NP_003958.1</p> <p>MGAAAGAGG TCTTCTACC GCAGACAGC ACTGTGATT TGTACCAAGA ATGA</p> <p>YFKALHTPTN FLILLALAD MFLGLLVLP LSTIRSESCW FPGFLRLH TYDLFLCLT</p> <p>SIFHLCTFIS DRHCAICDPL LYSKFTVRV ALRVILAGV VPAAYTSLFL TYDVVETRLS</p> <p>QWLEEMPCVG SQLLLNRFW GWLNFLPFFV PCLIMISLV KIFVATRQA QDITLTKSL</p> <p>AGAAKHERKA AKTLGIVVGI YLLQWLPTI DTMVDSLHF ITPLIVFDIF IWFAYFNSAC</p> <p>NPIIYVSQ WFKALKLTL SQKVFSPQTR TVDIYQE</p>
359	6777	G Protein-Coupled Receptor TM7SF1	Homo sapiens	<p>NM_003272</p> <p>CGGCGCATG CCGGAGACC CCGCGGGGG CGCGGGCGG CGTGAGCCC GATGAGGCC A</p> <p>GAGCGTCCC GGCAGGGGG CAGCGCCCC GGCAGATGG AGACCCGCC GTGGGACCCA</p> <p>GCGCGAAGC ACTCGCTGC GCCACGCTG ACCCGGCCG TGCCCCCTA CGTGAGCTT</p> <p>GGCTCACCG TGTCTAACG CGTGTCTAC CGCTGTCTC TGCTGTCTC CTACGTGCG</p> <p>CTCTGGCTG TGTGCGTTA CCGCCACAAG CGGTCTCAGT ACCAGAGCGT CTCTCTCTT</p> <p>CTCTGCTCT TGTGGGCTC CCGCGGACC GTCTCTCTC CTCTCTCTT CAAAGACTTC</p> <p>GTGGGGGCA ATTGCTGAG CCGCTGCTC TTCTGCTGC TCTACTGCT CCGTGTGTC</p> <p>CTGCAGTTT TCACCTCAC GTGATGAAC TTGACTTCA CGCAGGTGAT TTCCAAGCC</p> <p>AAGTCAAAAT ATTCTCAGA ATTACTCAA TACCGTTGC CCGTCTACT GCGCTCCCTC</p> <p>TTCTACGCT TTGTTTCTT GTTGTGTAAT TTAACCTGT CTGTGCTGT AAGACGGGA</p> <p>AATGGGAGA GAGAGTTAT CGTCTCTGT CGAGTGCCA TTAATGACAC GCTCTCTGT</p> <p>CTGTGTGCG TCTCTCTC CATCTGCTC TACAAATCT CTAAGATGC CTGAGCCAAC</p> <p>ATTACTTGG AGTCCAAGG CTCTCCGTG TGTCAAGTA CTGCACTGG TGTCACGTG</p> <p>ATACTGCTT AACCTCTCG GCGCTGCTAC AACCTGTCA TCGTCTCAT TTCTCAGAAC</p> <p>AAGAGCTCC ATTCTTTGA TTATGACTG TACAATGAT CAGACAGCG AGATTGAGG</p> <p>AATCAGCTG GAGATGCTG ATACGTATTA TTGGAGTGG TGTATTGTT TTGGGAATC</p> <p>TTACCTACA CCTAGTCT TATTCTCT CCGTGGATC AGTCCAGAT CTATTCTT TGACAACCT</p> <p>AACCTGGAA TGGTCCCGC CCGTGGATC TGGACATG CCGCTCAGG ACTTCAGGA</p> <p>CGAAGATATG ACAGTGATGA TGACTGGGA CAACAACCTA AGCTTCTT GGCACAAGCA</p> <p>GGTTTGTCT CAGATTACTA TGATTGGGA GACAAACCTA AGCTTCTT GGCACAAGCA</p> <p>GGAACTTTC AGACTCAAC TTGGATCTT GACAAACCTA GCGTTGGTA GCATAGTTA</p> <p>ACAGTTTAT GGACGATTC TCAGATGAA AGCTCAGAA AAGCATAGT ACAGTGAAT</p> <p>TTTAGGGCA CTCTCTCTA AGAATAGAA CTGATTTT ATTGTTACA GGTTCGAAT</p> <p>GGCCCCATG GAATAAGCAA TAATGTAGAC TGAAAAACC TTATTAGT ACTAAGAGG</p>

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	MRPERPRRG YVQLWLVLRY PVCLQFFTLT KTGNWERKVI VTVILLYTSR WELLPTTLVV LQGGFAPDYY atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	NP_003263.1 MRPERPRRG YVQLWLVLRY PVCLQFFTLT KTGNWERKVI VTVILLYTSR WELLPTTLVV LQGGFAPDYY atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	G Protein- Coupled Receptor TM7SF1	NP_003263.1 MRPERPRRG YVQLWLVLRY PVCLQFFTLT KTGNWERKVI VTVILLYTSR WELLPTTLVV LQGGFAPDYY atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	NP_003263.1 MRPERPRRG YVQLWLVLRY PVCLQFFTLT KTGNWERKVI VTVILLYTSR WELLPTTLVV LQGGFAPDYY atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	Homo sapiens
361	6853	Purinergic Receptor P2Y11	NM_002566	WDPARNDSLP FLFLCLFWAS FKAKSKYSPE LFVLCASVLS SONKSVHSFD DLTNPGMVPS AQAGTLQDST atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	NM_002566 WDPARNDSLP FLFLCLFWAS FKAKSKYSPE LFVLCASVLS SONKSVHSFD DLTNPGMVPS AQAGTLQDST atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	Purinergic Receptor P2Y11	NM_002566 WDPARNDSLP FLFLCLFWAS FKAKSKYSPE LFVLCASVLS SONKSVHSFD DLTNPGMVPS AQAGTLQDST atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	NM_002566 WDPARNDSLP FLFLCLFWAS FKAKSKYSPE LFVLCASVLS SONKSVHSFD DLTNPGMVPS AQAGTLQDST atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	Homo sapiens
362	6853	Purinergic Receptor P2Y11	NP_002557.1	SGFQDGLWLP ILVVEFLVAV HWRYGERACR WVLAALLIAMP CGLPLLTLLA ARRRWSTRCP atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	NP_002557.1 SGFQDGLWLP ILVVEFLVAV HWRYGERACR WVLAALLIAMP CGLPLLTLLA ARRRWSTRCP atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	Purinergic Receptor P2Y11	NP_002557.1 SGFQDGLWLP ILVVEFLVAV HWRYGERACR WVLAALLIAMP CGLPLLTLLA ARRRWSTRCP atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	NP_002557.1 SGFQDGLWLP ILVVEFLVAV HWRYGERACR WVLAALLIAMP CGLPLLTLLA ARRRWSTRCP atggatcgag agtgggttcc gccagcaatg gcggtggtct ccgctggcgc ctggagcgct agcctcaacc agcacgcct aactcagct agggccgagg gggtatagcc gcctacggcg ctgctgtgtg taccacatca agctttggag caggtgatgc gcagtgecca ccagaggagc ccgtcagagc AVVESVQLAV SLNRYLGIVH RPEACIKCIG LRVAALVAGS	Homo sapiens

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLXMA AVPSLGCCCR HCPGYRDSWN PEDA KSTGQA LPLNATAAPK RSEFQSRELS Q	Homo sapiens
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	atggcttcac ccagctctccc gggcagtgac tgcctccaaa tcattgatca cagtcatgtc A cccgagtttg aggtggccac ctggatcaaa atcaccctaa ttctggtgta cctgatcatc ttcgtgatgg gcctctctggg gaacagcgcc accattcggg tcaccagggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctgggacatc ttggtgttcc tcattggcat gccatgggag ttctacagca tcattctgaa tccctgacc acgtccagct acacctgtc ctgcaagctg cacacttcc tcttgagggc ctgcagctac gttacgctgc tgcacgtgct gacactcagc tttagcgct acatgcccat ctgtaccccc ttcagggtaca aggetgtgtc gggaccttgc caggtgaagc tgggtactga gtacctctg gtcacctccg ccttggtggc actgaccttg cbgtttgcca tgggtactga gtacccccctg gtgaacgtgc ccagccacgg ggtctcact tgcacacgtt ccagcacccg ccaccacag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gacctgttc cagtccagca tcttcggcgc ctctgtgtgc tactctgtgg tctgtctctc ctgagccttc atgtgtgga acatgatga ggtgtctatg aaaagccaga aggtctcgt ggcggggggc acggggccct cgcagctgag gaagtcagag agcgaagaga gcaggaccgc caggaggcag accatcatct tctgaggct gattgtgtg acattggcgt tatgtggat gcccaaccag attcggagga tcatggtgc ggccaaaccc aagcacgact ggacgaggtc ctactccgg gctacatga tctctctccc ctctcggag acgttttctt acctcagctc ggtcatcaac ccgtctctgt acacgtgtc ctgcagcag ttctggcggg tttcgtgca ggtgctgtgc tgccgcctgt cgctgcagca cgccaaaccac gagaagcgcc tggcgtaca tgcgactcc accaccgaca gcgccgctt tgtgcagcgc ccgtgtctct tccgtctccc gcgccagtc tctgcaagga gaactgagaa gattttctta agcacttttc agagcgagcc cgagccccag tctaaatccc agtcattgag tctcagatca cttagagccca acacaggccg gaaccagcc aattctgtc cagagaatgg ttttcaggag catgaagttt ga MASPSLPQSD CSQIDHSV PEFVATWIK ITLILVLI FVMGLLNSA TIRVTQVLQK P KGYLQKEVTD HNVSLACSDI LVFLGNPME FYSLIWNPI TSSYTLCKL HTFLFEACSY ATLLHLVLTLS FERYTAICHP FRYKAVSGPC QVKLLIGFW VTSALVALPL LFAMTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSIC TNLSSRWTFV QSSIFGAFV YLVLLSVAE MCWNMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIIFRLIV TLAVCWMPNQ IRIMAAAKP KHDWTRSYFR AYMLLPFE TFFYLSVIN PLYTVSSQ FRRVTVQLC CRSLQHANH EKRLRVHHS TTDSARFVR PLLFASRQS SARTEKIFL STFQSEAEPO SKSQSLLES LEPNSGAKPA NSAAENGFOE HEV ggacaggtgc ccgggagct tccgctcgc gaagaccag acggtgcag gagcccgccg A agctcgggg tcagcgccac catgaacgic tcgggctgcc caggggccgg gaacgcagc caggcgggcg gcgggggagg ctggcaccgc gagcggtica tctgcacct gctcttcgcg ctcatctcc tcgtgggacac cgtgggaac acgctgtgc tggcggtgt gctgcgcgg ggcaggcggg tcagactac caacctgtc atccttaacc tggcggtggc cgactgtgt ttcatcctgt gctggtgccc cttccaggcc accatctaca cctgggaagg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatctcc tcacatgca cgcagcagc ttcagcgtg ccgcgctctc cctggacagg tatctggcca tccgtacctc gctcactcc	Homo sapiens
365	7221	Galanin Receptor GalR2	NM_003857	ggacaggtgc ccgggagct tccgctcgc gaagaccag acggtgcag gagcccgccg A agctcgggg tcagcgccac catgaacgic tcgggctgcc caggggccgg gaacgcagc caggcgggcg gcgggggagg ctggcaccgc gagcggtica tctgcacct gctcttcgcg ctcatctcc tcgtgggacac cgtgggaac acgctgtgc tggcggtgt gctgcgcgg ggcaggcggg tcagactac caacctgtc atccttaacc tggcggtggc cgactgtgt ttcatcctgt gctggtgccc cttccaggcc accatctaca cctgggaagg ctgggtgttc ggctcgtgc tgtgcaagg ggtgcacttc ctcatctcc tcacatgca cgcagcagc ttcagcgtg ccgcgctctc cctggacagg tatctggcca tccgtacctc gctcactcc	Homo sapiens

366	7221	Galanin Receptor GalR2	NP_003848.1	<p> cgcgagctgc gcaagcctcg aacgcgctg gcagccatcg ggctcatctg ggggctgtcg ctgctctctt cggggcccta cctgagctac tacgcgcagt cgcagctggc caacctgacc gtgtgccatc cgcgtgagc gcgcctcgc cgcgcgcga tggacatctg caacttcgtc ttcagctacc tgcctcctg gctgttctc ggctgacct agcgcgcac cttgcgctac ctctggcgcg cgtgcacc ggtggcgcg ggctgggtg cccggcgcg caagcgcaag gtgacacgca tgatcctcat cgtggcgcg ctcttctgc tctgtggtg gccccaccac ggctcatcc tctgcgtgtg gttcgccag ttcccgctca cgcgcgcac ttatgcgctt cgcacccctt cgcacctgtt ctcctacgc aactcctcg tcaacccat cgtttacgcg ctggtctcca agcacttcg caaaggcttc cgcagatct cgcggggcct gctggggcct gccccaggcc gagcctggg cegtgtgtg gctgcgcgc ggggacacca cagtggcagc gtgttgagc gcgagtcag cgcactgtt cactagcgc agcggcgcg ggcccttcgt ccctgccccg gccttcca gccatgcac ctcgagcct gctcggccc gctcggcag ggcccaagg caggcgacg cactcagc gttgatgtg cctgaaagca cttagcgggc ggcgtggat gtacagagt tggagtcatt gttggggac cgtggggc NMVSGCPGAG NASQAGGGG WHPNAVIVPL LFALIFLVGT VGNLVLAVL LRGQAVSTT P NLFILNLGVA DLGFLCCVP FQATITLDG WVFSLCKA VHLIFTMH ASFTLAAS LDRLAIRYP LHSRELTPR NALAIGLIW LVLGTYART LRYLWRAVDP VAAGSGARRA KRKVTRMILI APRRAMDIC TEVFSYLLPV LVLGTYART LRYLWRAVDP VAAGSGARRA KRKVTRMILI VNAFLCLOWM PHALILCWV FQFPIFTRAT YALRILSHLV SYANSCVNP I VYALVSKHER KGFRTICAGL LGRAPGRASG RVCAARGTH SCSVLERESS DLHMSEAG ALRCPGASQ PCILEPCGP SMOGPKAGDS ILTVDA cctccctcca ggaagttga ggtgagacc cgaagacc tgggtgcaag cctccaggca A cctgaagggt agtgggctga gggctggccc agctccctc ctctcctct gtagagccta ggatgcccc ctgtgcagc ggtcctgag ctcactgagc cctcagcac cccaggggcc cagatggggg tcccccttg cagcagagag ccgtccctg tgcctccaga ctatgaagat gagtttctcc gctatctgtg gcgtgattat ctgtaccac aacagatga gtgggtcctc atcgagcctc atgtggctgt gttcgtctg gccctgggtg gcaacacgt ggtctgctg gcccgtgtgc ggaaccacca catgaggaca gtcaccaact acttcattgt caactgtcc ctggctgacg tctgtgtgac tgctatctgc ctgcgggcca gctgctgtt ggacatcact gagtcctggc tgttcggcca tgcctctgc aggtcctac cctatctaca ggtgtgtcc gtgtcagtgg cagtgttaac tctcagcttc atcgccctgg accgtggta tgcctctgc caccactat tgttcaagag cacagccccg cgggcccgtg gctccatcct ggcatctg gctgtgtcgc tggccatcat ggtgcccag cctgcagctca tggaaatgcag cagtgtgtg cctgagctag ccaaccgac aggtctctc tgcgtctgtc atgaacgctg ggcagatgac ctctatecca agatctacca cagtgtcttc ttatgttga cctacctggc cccactggc ctcatggcca tggcctattt ccagatatc cgaagctct ggggcccga gatccccgc accacctcag cagtgtgtg gaactggaag cgcctctcag accagctggg ggacctggag cagggcctga gtgagagcc ccagccccg ggcgggcct tctgtgtga agtgaagcag atgctgtgac gggggaagac agccaagatg ctgatgtgtg tgtgtgtgt cttgcctc tgctacctgc ccatcagcgt cctcaatgct cttaaagagg tgttcgggat gttccgcca gccagtgaac ggaagctgt. ctaagcctgc ttcacctct cccactggct ggtgtacgccc </p>	Homo sapiens
367	7246	Orexin Receptor 1	NM_001525	cctccctcca ggaagttga ggtgagacc cgaagacc tgggtgcaag cctccaggca A cctgaagggt agtgggctga gggctggccc agctccctc ctctcctct gtagagccta ggatgcccc ctgtgcagc ggtcctgag ctcactgagc cctcagcac cccaggggcc cagatggggg tcccccttg cagcagagag ccgtccctg tgcctccaga ctatgaagat gagtttctcc gctatctgtg gcgtgattat ctgtaccac aacagatga gtgggtcctc atcgagcctc atgtggctgt gttcgtctg gccctgggtg gcaacacgt ggtctgctg gcccgtgtgc ggaaccacca catgaggaca gtcaccaact acttcattgt caactgtcc ctggctgacg tctgtgtgac tgctatctgc ctgcgggcca gctgctgtt ggacatcact gagtcctggc tgttcggcca tgcctctgc aggtcctac cctatctaca ggtgtgtcc gtgtcagtgg cagtgttaac tctcagcttc atcgccctgg accgtggta tgcctctgc caccactat tgttcaagag cacagccccg cgggcccgtg gctccatcct ggcatctg gctgtgtcgc tggccatcat ggtgcccag cctgcagctca tggaaatgcag cagtgtgtg cctgagctag ccaaccgac aggtctctc tgcgtctgtc atgaacgctg ggcagatgac ctctatecca agatctacca cagtgtcttc ttatgttga cctacctggc cccactggc ctcatggcca tggcctattt ccagatatc cgaagctct ggggcccga gatccccgc accacctcag cagtgtgtg gaactggaag cgcctctcag accagctggg ggacctggag cagggcctga gtgagagcc ccagccccg ggcgggcct tctgtgtga agtgaagcag atgctgtgac gggggaagac agccaagatg ctgatgtgtg tgtgtgtgt cttgcctc tgctacctgc ccatcagcgt cctcaatgct cttaaagagg tgttcgggat gttccgcca gccagtgaac ggaagctgt. ctaagcctgc ttcacctct cccactggct ggtgtacgccc	Homo sapiens

368	7246	Orexin Receptor 1	NP_001516.1	MEPSATPGAQ MGVPFGSREP SPVPPDYDE FLRYLRDYL YPKQYEWVLI AAYVAVFVA P LVGNTLVCLA VWRNHMRV TNYFIVNLSL ADVIATAICL PASLAVDITE SWLFHGHALCK VIPYLOAVSV SVALVTLSEI ALDRWYAICH PLLFKSTARR ARGSIILGIWA VSLAIMVPOA AVMECSVLP ELANRTRLES VCDERWADDL YPKIYHSCFF IVTYLAPLGL NAMAYFQIFR KLWGRQIPGT TSALVRNWKR PSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTKMML MWLLVFALC YLPISVLNVL KRVEGMFROA SDREAVYACF TFSHLVLYAN SAANPIIYNF LSGKFRQEFK AAFSCCLPGL GPGSLKAPS PRSSASHKSL SLQSRCSISK ISEHWLTSV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	ggggggggggg taattgagct teagctgagc cggagcgtgc ttctctctcc tgggtgcaatt A gtgcaagcct ccagtgccgg gtccctagtt cctcagctgc ctatctctcc ggtgcaacat cgctgtataa gacagcaaaag ccaccgcaga agttgcccg cagaagactc cggaggaatt ggctcagtaa cttttcagct cattttctgc tgggagccc ctctagctc ctccgcgcag cctttccac cggaaatcac cagtgtctcat ggagcaggcg gagagagct tgcagcattg agcggaaacg gacttgagc cgtgatgtcc ggcacaaat tggagagctc cccccctgt cgcaactggt catctgctc ggagctgaat gaaactcaag agccctttt aaacccacc gactatgacg acgaggaatt cctgcggtac ctgtggaggg aatacctgca ccgaaagaa tatgagtggg tccctgacgc cgggtacatc atgtgtctc tctgtgctct cattgggaac gtcctggttt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactactc atagtcacatc ttctctgctc tgatgtgctc gtgacacatca cctgccttcc agccacactg gtcgtggata tcaactgagac ctggtttttt ggacagctcc ttgcaaatg gattcctbat ctacagaccg tgcgtgtgtc tgtgtctgtc ctacacatga gctgtatgc cttggatcgg tggatgcaa tctgtcaccc ttgtatgttt aagagcacag caaagcgggc ccgtaacagc attgtcatca ttgtgattgt ctcctgcatt ataattgattc ctacaggccat cgtcatggag tgcagcaccg tgttcccagg cttagccaat aaaccaccc totttacggt gtgtgatgag cgctgggtgt gtgaaattta tcccaagatg taccacatct gtttcttct ggtgacatc atggcaccac tgtgtctcat ggtgttggt tatctgcaa ttttgcaa actctggtgt cgacagatcc ctggaacatc atctgtagt cagagaaat ggaagccct gcagcctgtt tcacagctc gagggccag acgccaacg agtcccga tgcgctgtt ggcgctgaa ataaagcaga tccagaccag aaggaaaca gcccggtgt tgagcgtgtt ggcgctgaa tttgcaattt gctatctacc aattagcatc ctcaatgtgc taaagagat atttgggtg tttgccata ctgaagacag agagactgtg tatgctgtt ttacctttc acactgggt gtatatgcca atagtgtgc gaatccaatt atttaaat ttctcagtgg aaaatttga gaggaattta aagctgcgt ttctgtgtg tgcctggag ttccaccatc ccaggagat cggctcacca ggggacgac tagcacagag agccggaagt ccttgaccac tcaaatcagc	Homo sapiens

Homo
sapiens

NP_001517.1
Orexin
Receptor 2

370 7247

aactttgata acatatcaaa actttctgag caagttgtgc tcaatgagat aagcacactc
ccagcagcca atggagcagg accacttcaa aactgttaga atatttattc atagacaag
gatccctgag taaaactatc ctttttaaaa tcaactggaa cagaaatttt attatcctat
gagtgaagc taaaattact tgtggtactt tttttttttt aatctattgc tctttggaaa
taaaaaaaa gtcagttaa aatgaaaaaa aaaaaaaa aaa
YIIVFWALI GNVLCVAVW KNHMRVTN YFVNLISAD VLVTITCLPA TLVVDITETW
FFQSLSKVI PYLQTVSVSV SVLTLSIAL DRWYAICHL MEKSTAKRAR NSIVIIWIVS
CIIMIPQAI MECSTVFPGL ANKTTLETVC DERWGGEYIP KMYHICFFLV TYMAPLCLMV
LAYLIQIFRL WCRQIPGTSS VVQRWKPLQ PVSQPRGPG PYKSRMSAVA AEIKQIRARR
KTARMLMVL LVEAICYLPI SILNVLKRVF GMEFHTEDRE TVYAWFTFESH WLVIYANSAAN
PIYNFLSGK FREEFKAAFS CCCLGVHHRQ EDRLTRGRTS TESRKSLSATQ ISNFDNISKL
SEQVLTSSIS TLPANGAGP IQNW

Homo
sapiens

NM_000952
Platelet-
Activating
Factor
Receptor

371 8436

ccagctgata ttccagcca cagcaatgga gccacatgac tccctccaca tggactctga A
gttccgatac actctcttc cgattgttta cagcatcattc ttgtgtctg ggtcattgc
taatggctac gtgtgtgagg tctttgcccg cctgtaccct tgaagaaat tcaatgagat
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ctactgttc ctaccaaaga agttccgcaa gcacctcacc gaaaagttct acagcatgog
cagtagccgg aaatgctccc gggccaccac ggatacgtc actgaagtgg ttgtgccatt
caaccagatc cctggcaatt cctcaaaaa ttagtctctg cttc
MEPHDSSHMD SEFRYTLFPI VYSIIFLVG IANGYVLWF ARLYPCKKEN EIKIFMNL P
MADMLFLITL PLWIVYQNO GNWILPKFLC NVAGCLFIN TVCSVAFVGV ITYNRFQAVT
RPIKTAQANT RKRGISLSLV IWAIVGAAS YFLILDSINT VPDASAGSNV TRCFEHEYK
SVPVLIHIF IVFSEFLVFL IILFNLVII RTLLMQPVQQ QRNAEVRRA LMVCTVLAV
FIICFVPHV VQLPWTIAEL GFQDSKFHOA INDAHQVTL LSTNCVLDP VIYCFLLKKF
RXHLTEKFS MRSSRKCSRA TTDITVEVW PFNQIPGNSL KN

Homo
sapiens

NP_000943.1
Platelet-
Activating
Factor
Receptor

372 8436

tggggggcgc ctccttcgct cccgcccgcc tgtcaagctg ttttctagcg gccgagggac A
cgaggggggc taagaaagg ggcgccagc catgcaagg caaaaggcg ctgcggaacg
gggtccccc cgcagtgct gaggcaggag gtcggagcca caagtgggg gctgggaagc
aggaccagc acgggcgtct tggcaggcgg ccgggcccag gccaggctg ctgggggacgc

Homo
sapiens

NM_007223
G Protein-
Coupled
Receptor
Is8509

373 8509

tcagggtctt ccaccaagc catggggcgt gtggggcact cgggggtccc ctctgggtc
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ggaaatata tcatgcaag tccgtgaac tggtagtga cctctggcc catgeagtgg
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ccctgctggc aaacctgtt ccttttctta ctgtgaaca atctgtccg aagtcttga
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gttattccct ccaatatggg ccagatgctt tgaatgata gggaatcta cataaatcc
agtgtcctct ttattgagg agtatatgta tccatctcag tgatccatgt ccttagtgaa
gtccacatta ttctctgtg ggacaagagc tgggcagttt tgaatgggtc ttgagggtgg

374	8509	G Protein- Coupled Receptor Is8509	NP_009154.1	<p>taccacatgt gcaatttctg aggatgcctc acttccctgg gctctgcaga gaacacacag agagaagact ttcagagctc acagagcag ggagcaggag cactctaagg gaattc MWHNGSWISP NASEPHNASC AEAAGNRSALGEGEAQLY RQFTTTQVQV IFIGSLLGNF P KFLHKVFCVS VFKSVPTNRFI KNLACSGICA SILVCPDII LSTSPHCCWM IYTMFLCKV TNVADIYATSTCTEWSNSL GHLVVVLVYN ITTVIVPVV VEFLLILIR ALSASQKKV IIAALRTPQN TISIPYASQR EAEHATLLS MMVFLCSV PYATLVVYQT VLNVPDTSVF LLLTAVWLPK VSLLANPVLV LTVANKSVKRC LIGTLVOLHH RYSRRNVVST GSGMAEASLE PSIRSGSQL EMFHIGQQOI FKPTDEEES EAKYIGSADF OAKEIFSTCL EGEQGPQFAP SAPPLSTVDS VSOVAPAAPV EPETFPDKYS LQFGFGFEL PPQWLSERN SKRLLPLDG NTPPELIQTK VPKVGRVERK MSRNKVSIF PKVDS</p>	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	<p>ttgataggga tagaaacaca ttggctgctg tctatagta acaagatgct gttacattcc A ttgcctcact agctctgaag actatactag cgggacaaag aaagcacctg agatgagctg agaggagggt aaaggtacac agagatcccc tggatatttg tctatgtcc tctcaggggc tttgctacca ctagagaatt atccatatta agaaattgca ttgatattct ggtttctggt tcatttttta gggctctcaag agcagctca agtcaticac agtttccat caaatacaga cacagatcag ggaagattaa accctactaa tttctctgct gatgcctcac acaaggtgc cttccaagaa ctaatggcca aaatatccac ccacaacaca aataagctta gaaatctct tcttacaatc ctgacacaaat ggaagtcttc ctaaaacacc cagcatctaa taacaccagc acaaagaaca acaactcgcc atttttttac tttgagctct gccaacctcc tctccagct ttactcctat tatgcatagc ctatacttg gcttaattg tggcctttt tggaaacctc tctctcatca tcatcatctt taagaagcag agaaaagctc agaatttcc cagcatactg attgccaatc tctcctctc tgataccttg gtgtgtgtca tgtgcatacca ttttactatc atctacactc tgatggacca ctggatattt ggggatacca tgtgcagact cacatcctat gtgcagagtgt tctcaatctc tgtgtccata tctcacttg tttcactgc tgcgaaga tatcagctaa ttgtgaacc ccgtggcttg agccagtg tgactcatgc ctactggggc atcacactga ttggctgtt ttcctctctg ctgtctatc ctttcttct gtcctaccac ctcactgatg agcccttccg caactctct ctccccactg acctctaac ccaccaggtg gctgtgtgg agaactggcc ctccaaaag gaccggctgc tcttaccac ctccctttt ctgctgcagt atttgttcc tctagcttc atctcatct gctacttgaa gattgttatc tgctccgca ggagaaatgc aaagttagat aagaagaag aaaaagagg ccggtcctaat ggaacaaga ggaatcaaac aatgttgatt tccatctgg tgaccttgg agcctgctgg ctgccccgaa tatcttcaat gctatcttt actggtatca tgagggtgctg atgagctgcc accacgacct ggtatttgta gtttgcact tgggtgctat ggtttccaca tgtataaacc ctctctttta tgggtttctc acaaaaatt tccaaaagga cctggtagtg cttattcacc actgctgggt ctccacacct caggaagat gtgaaatat tgcctatctc actatgcaca cagactccaa gaggtcttta agattggctc gtatacaaac aggtatatga aaattgataa tgctgaagct cttcttgaat gggagctgga caggtaatgg tgggaatagg gcaagatgca gaaagaagaa accagaacca aaatatgcaa ctttatacc acttttctt taggctaaga ctgctgtct catatgtcta tccaacacac cctccaacat acacgaacac acataccacc cctttctct taagaaaaata actctaataa ttcaaacac ctcgcccga tcatgtgtg</p>	Homo sapiens

376 8896 Neuropeptide NP_006164.1
 Y Receptor
 Type 6
 Pseudogene
 Homo sapiens

377 9421 Neuropeptide nm_000909
 Y Receptor
 Type 1
 Homo sapiens

caagaatga gaatgagaaa gcagagagag agcaaacag cagtgatggc tggggaacaa
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 svsfslvft averyqlivn prgwkpsvth aygwtliwl flllslpiff isyhltdpff
 rnslptdly thqvacyenw pskkdrllft tsflilqyfv plgfilicyl kiviclrn
 akvdkkne grlnenkrin tmlsivtf gacwlpriiss msltgmrc
 cattccacc ctctctctt taataagcag gagcaaaaa gacaaattcc aaagaggatt A
 gttcagttca agggaaatgaa gaattcagaa taattttggt aaatggattc caatatggg
 aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctaaa
 ataactata acaaccaaac caatcaaat gaattcaaca ttatttccc aggttgaaaa
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 gatgtgtaag ttgaatcctt ttgtgcaatg tgtttcaatc actgtgtcca tttctctct
 gggtctcatt gctgtgggac gacatcagct gataatcaac cctcgaggggt ggagaccaaa
 taatagacat gottatgtag gtattgctgt gattgggtc ctgtctgtgg ctctctctt
 gccttctctg atctaccaag taatgactga tgagccgttc caaaatgtaa cacttgatgc
 gtacaaagac aaatacgtgt gctttgatca atttccatgc gactctcata ggttgcctta
 taccactctc ctcttgggtc tgcagtattt tgggtccactt tgtttatat ttatttgcta
 ctccaagata tatatacgc taaaaaggag aacaaacatg atggacaaga tgagagacaa
 taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgtctcca ttgtgttagc
 attgcagtc tgcctggctcc ctcttacct cttaacact gtgttgattt ggaatcatca
 gatcattgct acctgcaacc acaattctgtt attctgtctc tgccacctca cagcaatgat
 atccaattgt gtcaacccca tattttatgg gtctcggaac aaaaacttcc agagagactt
 gcagttcttc ttcaactttt gtgatttccg gtctcggaac aaaaacttcc agagagactt
 catgtccacg atgcacacag atgtttccaa aactcttttg aagcaagcaa gccagtcgc
 atttaaaaa atcaacaaca atgatgataa tgaataaatc tgaactact tatagcctat
 ggtcccgat gacatctgtt taaaaacaag cacacctgc aacatactt gattacctgt
 tctcccaagg aatggggttg aatcatttg aatgacta agatttctt gcttgcctt
 ttactgttt tgtttagtt gtataatta catttgaac aaaaggtgtg ggccttggg
 tcttctggaa atagtattga ccagacatct ttgaagtgt ttgtgaaat ttatgcata
 aatataaga ctittatact gtactattg gaatgaatt tctttaaagt attacgtgc
 gctgacttca gaagtacctg ccatacata cggtcattag attgggtcat cttgattaga
 ttagattaga ttagtattgc aacagattgg gccatctta ctttatgata ggcattctt
 tagtgtgta caatagtaac agtatgcaa agcagcattc aggagccgaa agatagctt
 gaagtcatc agaagtgggt tgagggttct gtttttgggt ggttttgggt tgttttttt
 ttttttccacc ttaaggggagg ctctcatttc ctccgactg attgtcactt aaatcaaat

Accession	Gene	Protein	Species
9421	Neuropeptide Y Receptor Type 1	NP_000900.1	Homo sapiens
9834	Corticotropin releasing factor Receptor 1	NM_004382	Homo sapiens

380	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	MGHPQLRLV KALLLLGLNP VSASIQDQHC ESLSLASNIS DNGYRECLAN GSWAARVNYS P	Homo sapiens
				EQEILNEEK KSKVHYHVAV IINVLGHCI S IVALLVAFVL FLRLRSIRCL RNIIHWNLS	
				AFILRNATWF VQLTGMSPEV HQSNVGMCR L VTAANYFHV TNFFMFGEG CYLHTAIVLT	
				YSTDRLRKWM FICIGWGVF PIIVAWAIGK LIYDNEKWF KRPQGVYTDY IYQGPMLVL	
				LINFIFLENI VRILMTKLRA STTSETIQYR KAVKATLVLL PLLGITYMLF FVNPGEDEV S	
				RVFIYENSF LESFQGFYS VFYCFINSEV RSAIRKRWHR WQDKHSIRAR VARAMSIPTS	
				PTRVSEHSIK QSTAV	
381	10457	Frizzled-2	NM_001466	cgagtaaagt ttgcaaaag ggcggggagg gcgcagccgc agcgagagg cgcggggaa A	Homo sapiens
				gaagcgcaagt ctccgggttg gggcgggggg gcgggggggc gccaaagagc cggtggggg	
				gcggcgcca gcatcgcc cgcagcgcc ctgcgcgcgc tgctgtgccc gctgtgtgtg	
				ctgcgcgcgc cggggcgcc cagttccac ggggagaagg gcatctccat ccgggaccac	
				ggcttctgcc agccatctc cctccgctg tgacagaca tgcctacaa ccagaccatc	
				atgccaaacc ttctgggcca caccgaaccag gagagcgag gcctagaggt gcaccagttc	
				tatccgtgg tgaaggtgca gtgtctgccc gaactcgct tcttctgtg ctccatgtac	
				gcaccgtgt gaaccgtgt ggaacaggcc atccgcctg gccgtctat ctgtgagcgc	
				gcgcgccagg gctgcgaag cctcatgac aagttcggt ttcagtggcc cgaagcgctg	
				cgctgcgagc acttcccg gcacggcgcc gagcagatct gcgtcgcca gaaccactcc	
				gaggacggag ctcccgct actcaccacc gcgcgcgc gcggactgca gcgggtgccc	
				gggggaacc cgggtggccc ggcggcgcc ggcgtcccc cgcgtacgc cagctggag	
				cacccctcc actgcccgc cgtctcaa gtcctact atctcagcta caagttctg	
				ggcgagcgtg attgtgtgc gccctgcga cctgcgggc ccatgggttc catgtcttc	
				tcacaggagg agacgcgtt cgcgcgctc tggatctca cctgtcgtg gctgtgtgc	
				gcttccact tcttactgt cacaactac ttggtagaca tgcagcgtt ccgtaccca	
				gagcggccta tcaattttct gtcgggtgc tacacctg gtcggtggc ctacatggc	
				ggcttcgtg tccaggagcg cgtgtgtgc aacgagcgt tctccgagga cggttaccgc	
				acggtgtgc agggcacc aaaggagggc tgcacctcc tcttcatgat gctctacttc	
				ttcagcatgg ccagctccat ctggtgggtc atctgtcgc tcaactggtt cctggcagcc	
				ggcatgaagt ggggccaca ggcctcag gccaatctc agtactcca cctggcgcgc	
				tgggcccgtgc cggccgtcaa gaccatcac atcctggcca tgggccagat cgaaggcgac	
				ctgctgagcg gcgtgtgct cgtaggcctc aacagcctg accgctgcg ggttctgtg	
				ctagcgcgc tctctgtga cctgttcat ggcacgtct tctctctggc cggcttctg	
				tgcctcttc gcctccgcac cactatgaag cagcagggca ccaagaccga aaagtggag	
				cggctcatgg tggcatcgg cgtctctcc gtgcttaca cagtgcgcgc caccatgtc	
				atcgcttgt actctaca gacggcctc cgcgagcct gggagcgtc gtgggtgagc	
				cagcactga agagcctgc cctccgtgc cgcgcgact acacgcgcgc catgtcgcgc	
				gacttcacgg tctacatgat caaatacctc atgacgtca tctgtggcat cactcgggc	
				ttctgatat ggtcgggcaa gacgtgac tctgtgagga agttctacac tgcctcac	
				aacagccgac acggtgagac caccgtgta gggagcgcgc cagggcgaa cgcgcggcg	
				cttctctcc cccgggggtg ggccttaca gactcgtat tttattttt taataaaaa	
				acgatcgaaa ccatttact tttaggttg tttttaaag agaactctct gcccaacac	
				ccc	

382	10457	Frizzled-2	NP_001457.1	MRPRSALPRL LLPILLIPAA GRAQFHGKX ISIPDHGFCQ PISIPDLCTDI AYNQTIMPNL P LGHTNOEDAG LEVHQFYPLV KVQCSPELRF FLCSMYAPVC TVLEQAIPPC RSICERARQG CEALMNKGF QWPERLRCEH FPRHGAQIC VQNHSEDEGA PALLITAPP GLQPGAGGTP GGPGGGGAPP PYATIEHPFH CERVLRKPSY LSYFLGERD CAAPCEPARP DGSMTFFSQEE TRFARLWILT WSVLCCASTF FTVTYLVDM ORFYPERPI IFLSGCYTMV SVAYIAGFVL QERVVNERF SEDGYRTVQ GKKEGCTIL FMVLYFFSMA SSIWVILSL TWFLAAGMKW GHEAIEANSQ YFHLAAMAVP AVKTTITLAM QIDGDLISG VCFVGLNSLD PLRGFVLAPL FVYLFIGTSF LLAGFVSLEF INTIMKHDGT KTEKLERLMV RIGVESVLYT VPATIVIACY FYEQAFREHW ERSWSQHCK SLAIPCPAHY TPRMSPDFTV YMIKYMILLI VGITSGFMIW SGKTLHSWRK FYTRLNNSRH GETTV	Homo sapiens
383	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMANPIIY20)	NM_022571	atggccttac tgggcagcca gcaactcggc gccccctcgg cgcccgccgc acctggcggg A acttctctcag cggccacggc ggccgtgctc tctctcagca ccgtggcgag cgcggcgctg gggaacctga gcgacgcaag cggagcgccg acagctgccc ctcccggtgg cggcgccctt ggcggttccg ggccagcgcg ggagggcggg cggcgcggtga ggccggcgct agcccgagag cggcgccgc tgcgtgcga cggagctgca gtggcgccc aggcctcgt cctcctgctc atcttctgc tgcctagcct tggcaactgc cgccttcac ctgctcgtgt cctctatcga tctgctcacg cagctccgca ccgtcaccaa cgccttcac ctgctcgtgt cctctatcga tctgctcacg cgcgtgctct gccgcgcgc cgccttcctg gacctctca ccccgcccgg gggttcggcg ctggcgctgc ccggggggcc ctggcgcgcc ttctgcggc caagccgctt cttagctcgt tgcttcggca tgcgtacgc tcagcgtggc gctcatctgc ttgaccgtt actgcctat cgtcgccgc cgcggagaa gatcgccgc cgcgcgcgc tgcagctgct cggggcgcc tggtgacgg cctgggctt ctcttgccc tggagctgc tcggggcgcc cggggaactc ggcgggggcc agagcttcca cggctgctc tacggacct ccccgacc cgcgcagctg ggcgccccct tcagcgtggg gctgggtgg gctgctacc tgcctgccc cctgctcacc tgctctgccc actaccacat ctgcaagacg gtgcgcctgt cggacgtggt cgtgcggcgg gtgaacacct acgcggcgt gctgcgttct tcagcgaggt gcgcacggcc accaccgtcc tcctcatga	Homo sapiens
384	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMANPIIY20)	NP_072093.1	MALLESQHSQ APSAAGPFG TSSAATAAVL SFTVATAAL GNLSASGGG TAAAPGGGL P GGSGAAREAG AAVRRLGPE AAPLLSHGAA VAAQALVLLI IFLSSLGNC AWMGVIVKHR QLRTVTNAFI LSLSLDLT ALLCLPAFL DLTFPPGSA PALPAGPWRG FCRPSRFFSS CFGIVYAQRG AHLVGLLRY RRPPEKIGR RRALQLLAGA WLTAIGFSLP WELLGAPREL AAGQSFHGCL YRTSPDPAQL GGFPSVGLWV ACYLLPFLLI CFCHYHICKT VRLSDVRVRP VNTYARVLR SARCAREPPS SS	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	cattcagaga cagaaggtgg atagacaaat ctccacctc agactggtag gctcctccag A agccatcag acaggagat gtgaaatccc ccagcactca tcccagaatc actaagtggc acctgtcctg ggccaaagtc ccaggacaga cctcatgtt cctctgtgg aatacctccc caggaggcca tcctggatit cccccctgca acccaggtca gaagtctcat cgtcaaggtt gttcatctt ttttttctg tctaacagct ctgactacca cccaaccttg aggcacagt aagacatcgg tggccactcc aataacagca ggtcacagct gctctctgg aggtgtccta caggtgaaaa gccacggcag ccagtcaggga tttaagttka cctcaaaaat ggaagatttt	Homo sapiens

aacatggaga gtgacagctt tgaagatttc tggaaagggt agatcttag taattacagt
tacagtcta cctgcccc ttcttacta gatgcgccc tatggaacc agaattccctg
gaaatacaaa agtattttgt ggtcattatc tatgccttgg tttctgtct gagctgctg
ggaaactccc tcgtgatgct ggtcatctta tacagcaggg tcggccgctc ggtcactgat
gtctacctgc tgaacctagc ctggcccgac ctactctttt cctgacctt gccatcttg
gcgcctcca agtggaatgg ctggattttt ggcacattcc tgtgcaagg ggtcactc
ctgaagggaag tcaacttcta tagtggcacc ctgtacttgg cctgcatcag tgtggaccgt
tacctggcca ttgtccatgc cacacgcaca ctgaccaga agcgtactt ggtcaaatc
atatgtcta gcatctggg ttgttcctt cctctggcc tgcctgtctt actttccga
aggaccgtct actcatcaa ttgtagccca gctgctatg agacatggg caaatata
gcaaaactggc ggtgctgtt aggtactctg cccagtcct ttggcttcat cgtgccactg
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cagaagcacc gggccatgct ggtcatcttt gctgtcgtcc tcatttctt gctctgttg
ctgcctaca acctgttctt gctggagac acctcatga ggaaccagg gatccaggag
acctgtgagc gccgcaatca catgaccgg gctctggatg ccacagatg tctgggcac
cttcacagct gctcaaccc cctcatctac gcttcattg gccagaagt tgcctatgga
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cccttgcca taattactat gctatttctt ggagctctgc ccactctgc cctgagccca
tggcactcta ttttctaaga agtgaaaatc tacactccag tgagacagct ctgcatactc
attagatgg ctagtatcaa agaaagaaa atcaggtctg ccaacggggg gaaacctgtc
tctactaaa atacaaaaa aaaaaaaat tagccggcg ttgtgttgag tgcctgtaat
cacagctact tgggaggtct agatgggaga atcacttgaa cccggagaca gaggttgcag
tgagccgaga ttgtgcccct gccatccag ctgagcgaca gtgagactct gtctcagtc
atgaagatgt agaggagaaa ctggaactct cgaggttgc tgggggggat tgtaaaatgg
tgtgacct gcagaagaca gtatggcagc ttctcaca acttcagaca tagaattaac
acatgatct gcaattccac ttataggaat tgaccacaa gaaatgaaag caggacttg
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cgaagtatcc ttacgctga agaggaatg aagtactcat acatgttaca acacggaga
accttgaaa ctttatgcta agtgaataa gccagacatc aacagataaa tagtttatga
ttccacctac atgaggtact gaggtgaac aaattacag agacagaaa cagaacagt
attaccagg actgagggga ggggagcatg ggaagtgcg gtttaatgg cacagggtt
atgttttaga tgttgaaaaa gtctgcaga taacagtag tgatgtgt accgcaatgt
gacttaatgc cactaaattg acattaaa atgtttaaa tggtaattt tgttatgtat
attttatc aatttaaaa aaacctgag ccccaaaagg tatttaac accaaggctg
attaaccaa ggtagaacc acctgcctat atttttgtt aatgatttc attcaatc
tttttttaa taaccattt ttacttgggt gttat

386	14198	Interleukin- 8 Receptor B	NP_001548.1	MEDFNESDS FEDFWKGEDL SNYSYSSTLP PFLDDAPCE PESLEINKYF WIIYALVFL P	Homo sapiens
				LSLLGNLSVM LVILYSRVGR SVTDVYLINI ALADLLFALT LPIWAASKVN GWIFGTFLCK	
				VVSLKEVNF YSGILLIACI SVDRYLAIVH APTLTQKRY IVKIFCLSIW GLSLILALPV	
				LLFRRTVYSS NVSPACYEDM GNNTANWRML LRILPQSEFF IVPLILMLFC YGFIERTLFK	
				AHMQKHARM RVIFAVVLIF LLCWLPYNLV LLADTLMTQ VIQETCERN HIDRALDATE	
				ILGIHSCIN PLIYAFIGQK FRHGLKILA INGLISKDSL PKDSRPSFVG SSSGHTSTTL	
387	14641	Calcitonin Receptor	NM_001742	cagaattcca ggacaagag atcttcaaaa atcaaaaatg aggttccat ttacaagcgc A	Homo sapiens
				gtgcttgcca ctgtttcttc ttctaaatca cccaaccca attctttac gtctaggac gaaagaagat	
				tcaaacctat ccaacaatag agcccaagcc attctttac gtctaggac gaaagaagat	
				gagtgatgca cagtacaaat gctatgacccg aatgcagcag ttaccgcac accaaggaga	
				aggtccatat tgcaatcgca cctgggatgg atggctgtgc tgggatgaca caccggctgg	
				agtattgtcc tatcagttct gccagatta ttctccggat ttgatccat cagaaaaggt	
				tacaaaatc tgtgatgaa aaggtgtttg gtttaaacat cctgaaaaa atcgaaacctg	
				gtccaaactat actatgtgca atgctttcac tcttgagaaa ctgagaagt catatgttct	
				gtactatttg gctattgttg gtcattcttt gtcaatttt accotagtga ttccctggg	
				gatttcgtg ttttcagga gccctggctg ccaaaaggga accctgcaca agaactgtt	
				tcttacttac attctgaatt ctatgattat catcatccac ctggttgaag tagtaccaca	
				tggagagctc tgcgaaggg acccggtgag ctgcaagatt ttgcatttt tccacaagta	
				catgatggcc tgcaactatt totggatgct ctgtgaagg atctatcttc atacactcat	
				tgtcgtggct gtgtttactg agaagcaacg ctgtcggttg tattatctct tgggtgggg	
				gttcccgctg gtgccaaaca ctatccatgc tattaccagg gccgtgtact tcaatgacaa	
				ctgctgggctg agtgggaaa cccatttgc ttacataatc catggacctg tcatggcggc	
				acttgtggtc aatttcttct ttttgtcaa catgtgtcgg gtgcttga ccaaatgag	
				ggaaecccat gaggggaat ccacatgta cctgaaggct gtgaaggcca ccatgatcct	
				tgtgccctg ctgggaatcc agtttgtgt ctctccctgg agacttcca acaagatgct	
				tgggaagata tatgattacg tgatgcactc tctgattcat ttccagggtc tcttgttgc	
				gaccatctac tgcttctgca acaatgaggt ccaaacacc gtgaagcgc aatgggcca	
				attcaaaatt cagtgaacc agcgttggg gagggcgcgc tccaccgct ctgctgcgc	
				tgcagccgct gctgcggagg ctggcgacat ccaatttac atctgccatc aggagctgag	
				gaatgaacea gccaaacaac aaggcgagga gactgctgag atcatcctt tgaatatcat	
				agagcaagag tcatctgctt gaatgtgaag gcaaacacag catcgtgac actgagccat	
				catttcttg gagaagacc atgcatttaa agtattctcc atctccacg gaaccgaaca	
				tatcatttgt gaagaattat tcatgtgaat tgtccattgt aaatctgaag aaagtattc	
				tgtgtactgt tgccttggga gacagtctag gaatggagtc tccactgca acttgtgac	
				tccatcttc atccaggact gagatgaaa tgtcacagta atgcaagcaa agtatcaaa	
				aaaaacaatg aaattgacct agttcagata cagggtgtc ctgtcaata ctgagccatt	
				tatacccttg aaattataa atcactgtca atattttat ttttaactct ggattttgaa	
				ttagattatt tctgtatttg gctatggatc tgatttttaa tttttttaa ttccagtcaa	
				ttctgatgtt actgagatgt ttaccatcc ttacaatgta aaccacatga actacgtgac	
				ctctgcaaga caagcggtc ttctaataga gagatttaga aatatgtgaa gaaaagacc	
				tgcatttggc aggaagatgt atgcttggaa tgcataaaga atttagagtc aatttgtga	

388	14641	Calcitonin Receptor	NP_001733.1	<p> aaacattaca tgcctcagctt gggtttggac aagcctgtcc attgggcagg acctagctgt tgtaagaat tggctttaat gttgaatgta ttttgggttc tgatgtttat aaactgagag gtcacaaaga atctatcact aaaaattttt acaaaactgc caaaatata attcttagtg gaagacaata ctccctttaa agagagtgtg ccactccctt aaactccagg atttataaag caaatctac ccaaggtttat aaagcagatt acctcttgcc ctgggttgct atctagcagt aaaagataaa tttgttgaat attggttaatt aaaagactcc acataagtc attaactgct ttcccccag ctccaagct taaaagagc tgggctttt ccaggaagat ccaggagggc taattagaaa tcaacttgtg gtgaccgct tgtttctgt tattacaaa caggaggggga aaaaattaac tgcctcaaat ttaaccataa atcaattcat gtttaacgtt tctcattaaa atccagtatt atattatcat atctctctt acttccact ataatctt tgaataatcct gaataaacca gtatcgttac tggcacctga aattaatttg tgaatttga acagtaatca gagtiaccat tatttaattt gtatgctaaa tgaggaggta cattgaaacc ctccaaatct ccagtctcat ctatgtcata ttttgccact gctttcaga agtgatttag ttgtggaaag ataataaat gatttgttat ggttacatat tttagccacc cagagaaaaa taattatatt tctacagaga aaatgaattt gggatactaa agtagttaa gtctccttta ctgaatgtaa gggggggac gaaaagaagg tatttttcca atcacagtgt tatgtagtat tgttctatct ttgtttacaa acatggaaaa cagagtattt ctggcagctg tggtaacaaat gtgataatat attgctaaaa tattttagat gtattatgc taatatagta ggggttgaag aaaaacaaat agcttattat agaatggcac atagtctgc ccaattatg tgaagtgtt atgcttgtgt atatgtataa ataatacag agtacgttaa aagcaaaaag atgtatattt gcatattttt ctaaagaat atattatca tcttttcatt c </p>	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p> MRFTFSRCL ALFLLLNHT PIPAFSNQT YPTTEPKPFL YVGRKMMMD AQKYDRMQ P QLPAYGEGP YCNRTWDGWL CWDDTPAGVL SYQCPDYFP DFDPSKATK XCDEKGVWFK HPENNRWNSN YTMCAFTPE KLNAYVLY LAIVGHSLSI FTLVISLIGIF VFFRSLGQQR VTLKNNFLT YILNSMIII HLVEVPNGE LVRRDPVSCK ILHFFHQYMM ACNYFWMLCE GIYHLTLIV AVTEKQRLR WYLLGWGFP LVPTTHAIT RAVYFNDNCW LSVETHLLYI IHGPVMAALV VNFPELLNIV RVLVTKMRET HEAESHYMLK AVKATMILVP LLGIQFVFP WRPSNKMGLK IYDYMHSLI HFQGEFFATI YCFCNNEVQT TVKROWAQFK IQWNQWGRR PSNRSAPAAA AAEEAGDPII YICHELNE PANNQGEESA EIIPLNIEQ ESSA caaacgttcc caaatcttcc cagtcggctt gcagagactc ctgtctccca ggagataacc A agaagctgca tcttattgac agatggtcat cacattgggt agctggagtc atcagattgt ggggcccgga gtgaggctga agggagtga tcagagcact gcctggagat cacctctact ttcctgtac cgtgcctgt gactgaagg ggtgaacaa tacactcctt ttctacaac cagcttgcct ttttctgccc caaatgagc ggggaatcaa tgaatttcag cgatgttttc gactccagt aagattatct tgtgtcagc aatacttcat attactcagt tgattctgag atgttactgt gctccttga ggaggtcagg cagtctcca ggctatttgt accgattgcc tactccttga tctgtgtctt tggcctcctg gggaatatc tgggtgtgat cactttgct ttttataaga aggccaggtc tatgacagac gtctatctct tgaacatggc cattgcagac atcctctttg tcttactct ccatcttg gcagtgagtc atgccactgg tgcgtgggtt ttcagcaatg ccacgtgcaa gtgtgctaaa ggcatctatg ccatcaact taactggggg atgctgtctc tgaattgcat tagcatggac cggtacatcg ccattgtaca ggcgactaag </p>	Homo sapiens

tcattccggc tccgatccag aacactaccg cgcacgaaaa tcaatctgct tgtgtgtggt
gggtgtgcag tcatctctc cagctcaact ttgtctctca accaaaaata caacacccaa
ggcagcagtg tcttgaacc caagtaccag actgtctcgg agccatcag gtggaagctg
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atcctgttaa tcatagctgt ggtgtgtgtg ttctgggttt gtccagattcc tcataacatg
gtcctgcttg tgacggctgc aaatttggtt aaatgaacc gatctgcca gagcgaaga
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Homo sapiens

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Homo
sapiens

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395	17345	G Protein- Coupled Receptor D6	NM_001296			Homo sapiens

396 17345 G Protein- NP_001287.2 Homo sapiens
 Coupled
 Receptor D6

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 VEVQTHENPK GWNCHADFG GHGTIWKLF RLQONLLGFL IPLLAMIFY SRIGCVLVR
 RPAGQGRALK IAAALIVAFF VWFEPYNLT FLHTLLDLQV FGNCVSOHL DYALQVTE
 AFLHCCFSP I LYAFSSHRFR QYLKAFIAV LGWHLAPGTA QASLSSCSSES SILTAQEEMT
 GMDLGERQS ENYPNKEDVG NKSA

397 17535 Gaba (b) NM_001470 Homo sapiens
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399	17666	Glucagon-Like Peptide 1 Receptor	NM_002062	<p>gaattccggg ttgtgcatc cactctgga cgcctcctgt gtggcctgtc ggaatgacat A cgcctcatc agtctccga cgcgtcccg aggtgcagc gatggccag tectgaactc ccgcctatg cggcgcccc cggcccgctg cgccttgccg tgcctgctgt cgggatggtg ggcaggccg gcccccgc cagggtgccc actgtctccc tctgggagac ggtgcagaaa tgccagaat accgacgcca gtgccagcc tccctgactg aggatccacc tccctgcaca gaattgtct gaaccggac ctctgatga tacctctgt gccacagatgg ggagccaggc tcgttcgtga atgtcagctg cccctggtag ctagcctgg gccagatgt gccgcaggc cacgtgtacc ggtctgca acgtgaagg cctctgctg agaaggacaa ctccagcctg ccctggagg actgtcgga gtgcaggag tccaagcgg gggagagaa cccccggag gagcagctcc tgttctcta catactac acggtgggt acgcactctc ctctctgtc ctggttatc cctctggat cctctcggc ttcagacacc tgcactgac caggaactac atccacctga acctgttgc atcttctac ctgcagcat tgcctgtct catcaaggac gcagccctga agtgatgta tagcacagc gccacagc accagtggga tgggtctctc tctacctgg actctctg ctgcccctg gtgttctgtc tcatgcagta ctgtgtggc</p>	Homo sapiens

400 17666 Glucagon- NP_002053.1 MAGAPGPLRL ALLLGNVGR AGPRQGATV SLNETVQKWR EYRQCQRL TEDPPPATDL P Homo sapiens
 Like Peptide FCNRTFEDEYA CWPDPGPGSF VNVSCPWYLP WASSVPQGHV YRECTAEGLV LQKDNSSLPW
 1 Receptor RDLSECEESK RGRSSPEEQ LLFLYIYTV GYALSFSALV IASAILLGR HLHCTRNYYH

401 18471 G Protein- NM_016372 gccttgacaca tggagatgct tagctgaggg gttggctttg ttgactatt tgcaggtcgt A Homo sapiens
 Coupled gagatagagc ctgagatggg ggaactggcc ctgctctggg ggaattgggtc gtgacctgtg
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404	19072	G Protein- Coupled Receptor	ENSP00000016 4265	SDERLPGSA VGNLVCGLS LLANAWGLIS VGAKQKKWKP LEFLICTIAA THMLNVAVPI P ATYSVVQLRR QRPDEFWNEG LCKVFVSIFY TLTLATCFVS TSLSYHRMMW VCPVNVYRLS NAKKAQVHTV MGIMMVSFIL SALPAVGWHD TSERYTHGC RFIVAEIGLG FGVCFLILVG	ttggaaaccg aggttcagag aggtgtaag acctgcctag agtcaggcca gctgggtggg acttgaaccc acatccggca actgcaggc ccaggcccta gctgctacag tgcagaagag tttactccc ttgccaaag ccattttt tgtttttt ttactttatt tattatttta tttttgagc agagttttg tctgtttgc caggttgat gtgcaatggc acaatctcag ctcactgcaa cctctgcctc ctgggttcaa gcgagtcttc tgcctcagcc tccaagtacg tgggattaca ggtgccgct gccacgcctg gctaattttt tttttgtatt tttagtacag acaggttttc acctgttag tcaggctggt ctggaactcc tgacctcagg tgatctgcc atctcagcct cccaactgc taggattaca agcgtgaacc actgcatctg. gctcaaggg ccgtttgatg cagaggtagg atagcatacc catgggttcc ctggtgggtc caggtccccag gatggacaga gggagctttg gtgctgtagg taggtaggta gggcgccagg atcaggagac agagcaaggc caggcggggc ctcaaatgtc tgttggggg ttgcacttga tactaacggc tggggaaggc caagtgagg gctgtgtga gaaaggcctt gcgacaaa gctgagggtc cagaggggct gcctgggtc ctctgtgtga agctgggacc agctggccc aagaatgaag tctggactca gtagecaacc cctgcccct gcaggactct acgcccaccc ccgaaggctc tgcagtga caggagagg actggggcaa agaccagcct gagggtttc atccaagcag caggcaagac tgcctccct gagccattgc agacatgag gacatgagct ccagatgggt gactcggggg gtggcagctt cagagtcagg gcttgcctc gtaggcagcc cccactgccc caccccagc agcctgggtt cccccagct aaggtctcct atgtgtacag tgggggtctg cagcccggtc cctgtcaga tggaggcgag gggtctcatg aacagcaga gaccacaag gcacctcggg agcagagtgg gggcagtggt ggggagagc gggctggga gggagtcaga accacccctg cgtctcttac ggacggggaa gagggtacag cttgtggggc cactccatgc tgctgttata aagctccgg agtctcacc ctctagagca tggcctgttc ttageccatt ttccagatga agaaactgag ccccaagggt gtttagcagc ttctgagggt tcaagtggcc cacaacggc agaataca taccacatc ctccacact tcaactttt gtgceagtca cttaagcatc actctttgg acagagcaac gagggtctatc ctggagagag aggaatgcag ggacccaaa gcagggttag gctgaggag gccactggc gggagggggg tggtagaatc ttgaacaggc ttgagacctg gttctctaag cctcagtttc ctcatctcaa aaagggtatg gcagccgggc acagtgttc ataccgtta tcccagcact ttgggagggc gaggcaggag gatctcttaa gccaggaga tggaggctgc agtgagccat gattgagcca ctgcactcca gcctgggtga cagaatgaga ctgtctcaa acaagcggg. gaggaggtgg taatccatgc cccacttctc tccatgggca gccaggaga agcagagca agccaccca gtgctgccc gtagccaggt agctcccgga aggcggggcc tcccactgc acgtccagc tctttctcc ccaaggggcc ctctccttg gcagataccc acctgtcaga cctgctgtac acatggggag accgagactc agggggagct tgtgtgatgg tgggggggtc tgcaggtgccc aggcagacc ctgtgcccac aggtgtgtag ctccagcagc ctgcggggccc acgctcagc gccctggatg gcactctgc tgctgtgtg ctccgtggcc cagggccctgc tgctgctgt gtccctgtg gcctgcgacc gctacgggc tgacctcaa gctgtccggg agaatgcat ggccctcatg gccaacgacg aggagtcaga cgaatgg	Homo sapiens
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Ls19072

405 19501 G Protein- AB018301
 Coupled
 Receptor
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Homo
 sapiens

406	19501	G Protein- Coupled Receptor KIAA0758	BAA34478.1	<p> tgaacaaagc aggtccactc agaaagccat tgccttctgt ctgggtatg gctgccact tgccatctcg gtcacacgc tgggagccac ccagcccg gaaagtctata cgaggagaa tgtctgttgg ctcaactgg aggaaccaa ggcctgtgtc gcttcgcca tccagcact gatcattgtg gtgtgaaca taaccatcac tattgtgtc ataccaga tccagggcc ttccattgga gacaagccat gcaagcagga gaagagcagc ctgtttcaga tcagcaagag cattggggtc ctcaaccac tctgggct cactgggt tttgtctca ccactgtgtt ccaaggacc aacctgtgt tccatatac atttgcac ctaattgtc tccaggtt attcatatta ctcttggat gcctctgga tctgaagga caggaagctt tctgaataa gttttcattg tcgagatggt cttcacagca ctcaaatgc acatccctgg gtccatccac acctgtgtt tctatgagt ctccaatgc aaggagatt acaattgt tttgtaaac aggaacgtat aatgtttcca cccagaagc aaccagctc tccctggaa actcatccag tgtcttctcg ttgtcaact aagaacagga taatccaaac taccagaccc cccggggaca gtggctgtgc ttttaaaag agatgctgc aaagcaatgg ggaacgtgt ctcggggcag gtttccggga gcagatgcca aaagacttt ttcatagaga agaggtttc tttgtaag acagaataaa ataattgtt atgtttctgt ttgttctc cccctcccc ttgtgtgata ccacatgtgt atagtattt agtgaactc aagcctcaa ggcctcaact ctcgtctat attgtaatat agaatttca agagacattt tcaatttta cacattgggc acaagataa gcttgatta aagtagtaag taaaaggcta cctcagaaat acttcagta attcagaag ggaaggaaag aaggaaggaa ggaagaaag gagggaagaa gaaagaaag aaaaagagaa agatgaaat aggaacaaat aaagacaaac aacattaagg gccatattg aagatttcca tgttaatat ctaataaat cactcagtc aacattgaga attttttt taatggctca aaaaaggaaa ctgaagcaa gtcattggga atgaactct tggcagtat cttccatgat tcttctagc taagaggagg aaaaaaggc tgaataata gggagaaat tccctcatca gaacgactc aagtgataa caatattat agaaatgaa tggaggaag tatgacctc ctgagactaa ctttgatgt taagtttga actaagtga tgtatctga gaggaagtat tataagata tgtcattaga tccaagtgt gattaaatt ttatagtta tcagaaaaag cttatattt agttgttcc acatttga agcaaaaa atatttga tataccctc aattgcaaa ttgatatgt tgcactgaag acagaccctg tcatatatt aatggcttca agcaggtact tctctgtga ttatagaata gatttaata atcttagc attgtatatt attattgtg ttgtcactgt tattattatt gtggatactg gccctgggtg tgttgcatag ctccctatgt attctctgt tccatctta agttccaga ccaatata ttaaagattt tgcattgtct aaattgtgt tattccaac acgtggaaa ctcctggaaa gaaattttac attcgggtgt tctgtgtcc taatgacact tgacctgtt gaacaaagg cagagcctt cccaaggatt tgaattgtt tgaattatct gcatgtgtc tttttttg tgtgtattc attaaaaat ataaatttt atg </p>	Homo sapiens
				<p> CKKKIDVMP1 QILANEMKV MCDNPNVSLN CCSGNVNW KVEKQEGKI NIPGTPETDI P DSSCRYTLK ADGTQCPGS SGTVIYCE FISAYGARG ANIKVTFISV ANLTIPDPI SVSEGNFESI KCISDVSNYD EYWNVSAGI KIYQRFYTR RYLDGAESVL TVKTSTREWN GTYHCIFRYK NSYSIAIKDV IVHPLPLKLN IMVPLEATV SCGSHHIK CIEEDGDYKV TFHMGSSSLP AAKEVNRKQV CYKHNFNAS VSWCKTVDV CCHFTNAANN SWSPSMKLN LVPGENITCQ DPVIGVEPG KVIQKLCRES NVPSPESPI GGTITYKCVG SQWEKRNDC </p>	

407.	21632	G Protein- Coupled Receptor Is21632	AB040964	<p>ISAPINSILQ MAKALIKSPS QDEMLPTYLK DLSISIDKAE HEISSSPGSL GAINIILDL STVPTQVNSE MNTHVLSTVN VILGKPVLTN KVLQOQWNTN QSSQLHSVE RFSQALQSGD SPPLSFSQTN VQMSSTVTKS SHPETIYQORE VFYEDLWGN VVIDKSYLEN LQSDSSIVTM AFPTLQAILA QDIQENNAE SLVMTTIVSH NTTMPFRISM TFKNNSPSGG ETKCVFNFR LANNTGWDSD SGOYVEEGDG DNVTICIDHL TSFSLIMSPD SPDPSSLLGI LLDIISYVGV GFSILSLAAC LVVEAVVWKS VTKNRTSYMR HTICIVNIAAS LLVANTWFIV VAAIQDNRYI LCKTACVAAT FEIHFFVYLSV FFWMLTLGLM LFYRELVFELH ETSRSTQKAI AFCLGYGCP AISVITIGAT QPREVYTRKN VCNLWNETDK ALLAFAPAL IIVVNNITIT IWVITKILRP SIGDKPKQOE KSSLFQISKS IGVLTPLLGL TWGFLGTTVF PGTNLVPHII FAILNVFOGL FILLFGCLWD LKQVEALLNK FSLSRWSSQH SKSTSLSGSST PVFSMSSPIS RRENFLFGKT GTYNVSTPEA TSSSLENSSS ASSLIN</p> <p>accacccat cccgtcccta cgcacagtg tgtccagg ggatcggtg cctccagt A gctctgcag ctacctggc aacacaccc gcacccgtg gtaccacaac cgagccctg tggagggtga ttagcaggcg ggcactctcc tggccgagag cctcatccac gactgcacct tcatcaccag ttagctgacg ctgtctcaca tcggcggtg ggcctcagg gactgggagt gcaccgtgtc catggcccaa ggcacgcga gcaagaggt ggagatcgtg gtgctggaga cctctgctc ctactgccc gcgagcggtg ttgccaaca ccgcggggac ttcagggtgc ccggaactct ggtggcgc acagctacc agtctgctt gcagatccac ttcacctcag tgccccctggg cgggggtgccc cggggcacc gagcctccc cgggtgtgac cgtgccggcc gctggggacc aggggactac tcccactgtc tctacacaa cgacatcacc aggtgtgctg acaccttctg gctgatgcc atcaatgctt ccaatgctt gacctggct caccagctgc gcgtgtacac agcagagcc gctagctttt cagacatgat ggatgtagtc tatgtggctc agatgatcca gaaattttt ggttatgtcg accagatcaa agagctgta gaggatgag tggacatggc cagcaacctg atgtgtgtg acgagacct gctgtggctg gccagcgcg aggacaaggc ctgcagccgc atgtgtgggtg cctggagcg cattgggggg gcgcacctca gccccatgc ccagcacatc tcaatgaatg cgaggaaagt ggcattggag gcctacctca tcaagccgca cagctacgtg ggcctgacct gcacagcctt ccagagagg gaggagggg tgccgggac acggccagga agcctggcc agaaccccc acctgagccc gagccccag ctgaccagca gctccgttc cgtgcacca ccgggagggc caatgtttct ctgtcgtct tccacatcaa gaacagcgtg gccctggcct ccatccagct gccccaggt ctattctcat ccttccggc tgcctggct ccccggtgc cccagactg caccctgcaa ctgctcgtct tccgaaatgg ccgctcttc cacagccaca gcaacacct ccgcccctgga gctgtgggc ctggcaagag gctggcgtg gccaccccgc tcatcttcgc aggaacacgt gctgtggcg tgggaaacct gacagagcca tggccgcttt cgtcgcgga ctgggctgag gtagccgaac ctgtggccgc ttgtggagc caggaggggc ccggggaggg tgggggctgg acctcgagg gtgccaagt ccgtccagc cagcccaatg tcaagccct gcaactgcag caottgggca atgtggccgt gctcatggag ctgagcgctt tcccaaggga ggtggggggc gcgggggca ggctgcacc cgtgtgtat ccctgcacgg cctgtgctg gctctgctc ttgcaccaca tcatcaccta catctcaac cacagctcca tccgtgtgtc ccggaaaggc tggcacatgc tgtgaaact gtgttccac atagccatga cctctgctg ctttggggg ggcatacac tcaccaacta ccagatggtc tggcaggcgg tgggcatcac cctgcactac tctccctat</p>	Homo sapiens
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408	21632	G Protein- Coupled Receptor Ls21632	BAA96055.1	<p>gagtggtg gggtcctgc aggtcatgag gggcctatgc ctttactcct tttaaacacc agcaccgtc tttccccc cctaaacca accaccaga tttactata ggacaaatg gaaacagg gaaacctggg tcttgggag acaacagga acaacaggc tgacctaggg ttccctccc gcttccat cactctgccc tcatcacaa ggtgacagag gacacagggg aggggaaaa cccacacaca ctccttgaa tgggtcctgt tatttatgct tgctgacag acatataga agaaaaaaa agctttgta ttattcttc acatatgctg gctgctgtt acacacctg ccaatgcctt agcactggag agcttttgc aatatgctgg ggaagggga gggagggaat gaaagtcca aagaaaacat gtitttaaga actcgggttt tatacaatag aatgtttctt agcagatgcc tctgtttta atattataa atttgcaaa gccctttg HLPSLRQVV FQDRLPFQC SASYLNDTR IRWVHNRAPV EGDEAGILL AESLINDCTF P ITSELTLSHI GWASGEWEC TVSMAQGNAS KKVEIVLET SASYCPAERV ANNRGDFRWP RTLAGITAYQ SCLQYFTSV PLGGGAPGTR ASRCDRAGR WEPGDYSHCL YTNIDTRVLY TFVLPINAS NALTLAQLR VYTAASFS DMMDVYVVAQ MIQKFLGYVD QIKELVEVMV DMASNMLVD EHLWLQRE DKACSRVGA LERIGGAALS PHAQHISVNA RNVALEYLI KPHSYVGLTC TAFQRRGGV PTRPGSPGQ NPPEPEPPA DQQLRFCTT GRPNVSLSSF HIKNSVALAS IQLPPSLFSS LPAALAPPVP PDCTLQLLVE RNGRLFHSHS NTSRPGAAGP GKRRGVATPV IFAGTSGCGV GNLTEPVAVS LRHWAEGAP VAAWVSQEGP GEAGWTSEG COLRSSQPNV SALHQHILGN VAVLMELSAF PREVGAGAG LHPVVPCTA LLLLCLFATI ITYILNHSSI RVSRKGWML LNLCFHIAMT SAVFAGGITL TNYQMVCOAV GITLHYSSLS TLLMGVVKAR VLHKELTWRA PPQEGDPAL PTPSPMLRCW LVWRPSLGF YIPVALILLI TWIYFCAGL RLRGPLAQN KAGNSRASLE AGEELRGSTR LRSGPELLSD SGSLATGSA RVGTGPPED GDSLYSPGVQ LGLVTHFL YLAWACGAL AVSQWLPRV VCSCLYGVAA SALGLFVFTH HCARRRDVRA SWRACCPAS PAAPHAPRA LPAAEDGSP VFEGEPPLK SSPSGSSGHP LALGPCKLTN LQLAQSVCE AGAAGGEGE PEPAGTRGNL AHRHPNNVHH GRRHKSRAK GHRAGEACGK NRLKALRGA AGALELLSSE SGSLHNSPTD SYLGSSRNSP GAGLQLEGER MLTPSEGST SAAPLSEAGR AGQRRASRD SLKGGGALEK ESHRRSYPLN AASLNGAPKG GKYDDVTIMG AEVASGGCMK TGLMKSETTV atgttagcca acagctctc aaccaacagt tctgttctcc cgtgtcctga ctaccgacct A accacagcc tgcacttggg ggtctacagc ttggtgctgg ctgcggggt cccctcaac gcgctagccc tctgggtctt cctgcgcggg ctgcgctgc actcgtggt gagcgtgtac atgtgtaacc tggcggccag cgcactgtc ttcacctct cgtgcctcgt tctgtctcc tactacgca tgcaccactg gcccttccc gacctcctgt gccagacgac gggcgcctc ttccagatga acatgtacgg cactgtgac ttctgatgc tcatcaact ggacgctac gccgccatg tgcacccgt gcactgtgc cactgcggc gcccgcgt ggccggctg ctctgcctgg gctgtggg gctctatcgt gtgtttgccc tgccgcgcgc ccgcgtgac agccctcgc gtgcgcta cgggacctc gagtgccgc tatgtctga gagcttcagc gacgagctgt ggaaggcag gctgtccc cctgtgtgc tggccagagc gctgggttc ctgctgccc tggcgccgtt ggtctactcg tccggccgag tctctggac gctggcgcc cccagcga cgcagagcca gcggcgccg aagaccgtgc gcctcctgct ggctaacctc gtcatcttcc tgcgtgtgtt cgtgcccctac aacagcacgc tggcggtcta cgggctgtg cggagcaagc tgggtggcgc cagcgtgctt gccgcgac gcgtgcgccg ggtgctgatg</p>	Homo sapiens
409	22315	G Protein- Coupled Receptor GPR92/GPR93	NM_020400		Homo sapiens

410	22315	G Protein- Coupled Receptor GPR92/GPR93	NP_065133.1	MLANSSSTNS MCNLAASDLL AAIVHPLRLR DELWKGRLLP VIFLLCFVY AEGFRNTLRG SSFTQCPQDS AL	NP_065133.1 MLANSSSTNS MCNLAASDLL AAIVHPLRLR DELWKGRLLP VIFLLCFVY AEGFRNTLRG SSFTQCPQDS AL	Homo sapiens
411	22925	Latrophilin- 3	NM_015236	gaaaacacg agcctgttg tatgtggag ccccggtgc tctgtgaggt gaggcagatg aagccatttc gtggttctgc tttttgggag cateacactg tgcctctttt gtttaactgc ccggggctca atggtgtgat tgtggaact gcacccgct tgggacgac tcagggacg gcgtttacga aagaaatgtt aaaaaacatg gatttttagc aattgaagag caaattaagg tgattctgtt ttggagaaat tattcttttt ctttttaatt tggaaatagc aagagaaact agaaatatac gtaattttgt ttgaggaata ctccatacct gagtagacag ccatgtggcc tgatgtcttt agctccaata attcatgctt tcaagccgtg tcggcagaga gctatcctgt gagagctatc ctatagagct tcatcatgat agaaagtgc aactatggca ggactgatga ctgtcagat ggagaaatc cgatgttacc tgcagatgc gatgcaataa cagaaccccg tgtgagatgg tggcaggtcc gtccaggaa cttataaatac cttgaaatgc agtatgaatg aaaaagtttt tctttgtcct ggactactaa aaggagtata agtcocgacca ccaatctgg gcgtgtgtgca aagaccctct attatatgcc ctggactccc tacagaactg ataccctgac acttcattgc tggagagacca actacaacct acaagctccc gattttagt gtagatgga gctttgttct tcaacaaaga agtttgattt gcggactagg ataaagatg gagaggctat atgataccct cccttaccga tggggaggca aatctgacct atgggctatg ggtaatctat gcaacagaac aaacaatgg tgaacctta caccctacgg atcgaaaggaa catgggatac cttccaatgc ctttatgatt tgtggaattc tgtatgtgtg atgacaatga ggctactgga ataaagattg actacattta atagtttgggt ggatgtaccc ttctctaatt catacaggta acccagggga caacctactt tatgtatgga ataactata attttggacc tctggatagt agatcagggc aggcacatca	gaaaacacg agcctgttg tatgtggag ccccggtgc tctgtgaggt gaggcagatg aagccatttc gtggttctgc tttttgggag cateacactg tgcctctttt gtttaactgc ccggggctca atggtgtgat tgtggaact gcacccgct tgggacgac tcagggacg gcgtttacga aagaaatgtt aaaaaacatg gatttttagc aattgaagag caaattaagg tgattctgtt ttggagaaat tattcttttt ctttttaatt tggaaatagc aagagaaact agaaatatac gtaattttgt ttgaggaata ctccatacct gagtagacag ccatgtggcc tgatgtcttt agctccaata attcatgctt tcaagccgtg tcggcagaga gctatcctgt gagagctatc ctatagagct tcatcatgat agaaagtgc aactatggca ggactgatga ctgtcagat ggagaaatc cgatgttacc tgcagatgc gatgcaataa cagaaccccg tgtgagatgg tggcaggtcc gtccaggaa cttataaatac cttgaaatgc agtatgaatg aaaaagtttt tctttgtcct ggactactaa aaggagtata agtcocgacca ccaatctgg gcgtgtgtgca aagaccctct attatatgcc ctggactccc tacagaactg ataccctgac acttcattgc tggagagacca actacaacct acaagctccc gattttagt gtagatgga gctttgttct tcaacaaaga agtttgattt gcggactagg ataaagatg gagaggctat atgataccct cccttaccga tggggaggca aatctgacct atgggctatg ggtaatctat gcaacagaac aaacaatgg tgaacctta caccctacgg atcgaaaggaa catgggatac cttccaatgc ctttatgatt tgtggaattc tgtatgtgtg atgacaatga ggctactgga ataaagattg actacattta atagtttgggt ggatgtaccc ttctctaatt catacaggta acccagggga caacctactt tatgtatgga ataactata attttggacc tctggatagt agatcagggc aggcacatca	Homo sapiens

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 22925 Latrophilin-- NP_056051.1 MWPSQLLIFM MLLAPIHAF SRAPIMAVV RRELSCSEVP IELRCPGTDV IMIESANYGR P Homo sapiens
 3 TDDKICDSDP AQMENIRCYL PDAYKIMSQR CNNRTQCAV AGPDVFPDPC PGTYKYLEVQ

299/448

413	25359	G Protein- Coupled Receptor GPR34	NM_005300	<p>YECVPYVVEQ KVFCLPGLLK GYQSEHLEF SDHQSGAWCK DPLQASDKIY YNPWTPYRTD TLTEYSSKDD FIAGRPTTTY KLPHRVDTG FVYVDGALFF NKERTRNIVK FDLRLTRKSG EAIIANANYH DTSPYRWGGK SDIDLAVDEN GLWVIYATEQ NGKIVISQL NPYTLRIEQT WDTAYDKRSA SNAFMICGIL YVVKSVYEDD DNEATGNKID YIYNTQSKD SLVDVPFPNS YQYIAADVYN PRDNLVYVN NYHVVKYSLD FGLDLSRSG AHGQVQSYIS PPIHLDSLELE RPSVKDISTT GLGMSGTTT STTLRTTLLS PGRSTTPSVS GRNRSTSTP SPAVEVLDDM TTHLPASSQ IPALAESCEA VEAREIMWEK TRQGLAKQP CPAGTIGVST YLCIAPDGIW DPQGPDLUNC SSPWNHITQ KLASGETAAN IARELAEQTR NHLNAGDITY SVRAMDQLVG LLDVQLRNLIT PGKDSARS LNKLOKRERS CRAYQAMVE TVNNLQPOA INAWRDLTTS DOLRAATMLL HTVEESAFVL ADNLKTDIV RENTPNIKLE VARLSTEGNL EDLKFPENMG HGSTIQILSAN TLKQNGRNGE IRVAFVLYNN LGPYLSTENA SMKLGTEALS TNHSHVIVNSP VITAANKFV SNKVYLADPV VFTVKHIKQS EENFNPNCSE WSKSKRTMTG YWSTQGCRLL TTNKTHITS CNHLTNFAVL MAHVEVKHSD AVHDLILDVI TWVGILSLV CLLICIFTFC EFGLOQDRN THKNLCISL FVAELLEFLIG INRTDQPIAC AVFAALLHFF FLAFTWMFL EGVQLYIMLV EVFESEHSRR KYFYLVGYGM PALIVAVSAA VDYSYGTDK VCWLRLDTYF IWSFIGPATL IIMLNVIPLG IALYKMFHHT AILKPESGCL DNINYEDNRP FIKSWVIGAI ALLCLLGLTW AFGLMYINES TVIMAYLFTI FNSLQMFIF IFHCVLQKKV RKEYGKCLRT HCCSGKSTES SIGSGKTSQS RTPGRYSTGS QNSRIRRMWD TVRKQSESSF ITGDINSSAS INREPYRETS MGKLNIAVQ IGASEQCQGY KCHGYSTTEW</p> <p>atgagaagtc ataccataac aatgacgaca acttcagtag gcagctggcc ttactctcc A cacagaatgc gctttataac caatcatagc gaccaacgc cacaaaactt ctacgacaac ccaaatgtta ctacctgtcc catgtagtaa aaattgctat ctactgtgtt aaccacatcc tactctgtta ttttcatcgt gggactgggtt gggaacataa tgcacctcta tgtatttctg ggtattcacc gtaaaagaaa ttccattcaa atttatctac ttaacgtagc cattgcagac ctctactca tcttctgctt cctttccga ataagtatc atattaacca aaacaagtgg acactagggtg tgatttctgt caaggtgtgt ggaacactgt tttatatgaa catgtacatt agcatttatt tgcttggtt catcagtttg gatcgctata taaaaattaa tcggtctata cagcaacgga aggaataaac aaccaaacaa agtatttatg tctgtgtgat agtatggatg cttgcctctg tggatttctt aactatgatt atttaacac ttaagaaagg agggcataat tccacaatgt gtttccatta cagagataag cataacgcaa agggagaagc catttttaac ttcatttctg tggtaatgtt ctggctaatt ttcttactaa taatccttc atatatgaag attgggaaga atctattgag gatttctaaa aggaggtcaa aatttcttaa ttctggtaaa tatgccacta cagctcgttaa ctcttattt gtaactatca tttttactat atgttttgtt ccctaatg cctttcgatt catctacatt tcttcacagc taaatgtatc atcttgcac tggaagaagaa ttgttcacaa aaccaatgag atcatctgg tctctcatc ttccaatagt tgcttagatc cagtcagtga tttctgtatg tccagtaaca ttcgaaaaa atgtgtgcaa ctctctttta gacgatttca agtggaacca agtagaggtg aaagcacttc agaattttaa ccaggatact cctgcgatga tacatctgtg gcagtgaaaa tacagttctag ttctaaaaagt actga</p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHITIMTT TSVSSWPYSS HRMRITNHS DQPPQFSA PNVVTCRPMDE KLLSTVLTS P YSVIFIVGLV GNIALYVFL GIHRKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens

Receptor GPR34	415	30698	G Protein- Coupled Receptor Ls30698	AX068267	<p> TLGVILCKV GTLFYNNMYI SIILGFISL DRYKINRSI QQRKAITTKQ SIYVCCIVWM LAIGGFETMI ILTLKKGHN STMCFHYRDK HNAKEAIFN FILVNFWLI FLIILSYIK IGKLLIRISK RSKFPNSGK YATARNSEI VLIITICFV PYHAFRIYI SSQLNVSICY WKEIVHKTNE INLVLSFNS CLDFVYFIM SSNIRKIMQ LLFRFQGER SRSESTSEFK PCYSLHDTSV AVKIQSSKS T gttctcagat cggcttctcg caacaggcag tcagttctca ctggggccct tggactccca A tttcaaaat ggaagaaga catcacagcc actgacagg gacgiggga ggtgccaggt gatggtgagg catcatgcta gggagctgag ctctgacctt cctgctgggt gattctccac ctctgggctg ctagatctac ttcctggatg ccgtgaagat cctcatgtat gaaaatgaag tcccaggcaa ccatgatttg ctgcttagtg tcttctctgt ccacagaatg ttcaccatct agatccaaga ttcacctaata aagctatagt gaagtggcca accacatcct cgacacagca gccatttcaa actgggcttt catcccaac aaaaatgcca gctcggtatt gttgcagtca gtgaatttgt ttgccagaca actccacatc cacaataatt ctgagaacat tgtgaatgaa ctcttcattc agacaaaagg tttcacatc accataata cctcagagaa agcctcaat tttcccatga geatgaaca taccacagaa gatatttag gaatggtaca gattcccagg caagagctaa ggaagctgtg gccaaatgca tcccaggcca ttgcatagc tttcccaacc ttgggggcta tcttgagaga agccacttg caaaatgtga gcttccag acaggtaaat ggtctgtgct tctcagtggt ttaccagaa aggttgcaag aaatcatact cacttggaa aagatcaata aaaccgcga tgcagagcc cagtggttg gctggcact caagaaaagg agatgggatg agaaagcgtg ccaaatgatg ttggatatca ggaacgaagt gaaatgcgc tgaactaca ccaagtgtgt gatgtcttt tccattctca tgcctcaca atcgatgacc gacaaagtct tggactacat cactgcatt gggctcagc tctcaatcct aagcttggtt ctttgcctga tcaatgaag cacagtgtg tcccgggtg ttgtgacgga gatatacat atgcgtcag ttgcatcgt gaatataga gtgtcccttc tgactgcaa tgtgtggtt atcataggct ctactttaa cattaaggcc caggactaca acatgtgtgt tgcagtgaca ttttccagcc acttttcta cctctctctg ttttcttga tgccttcaa agcattgctc atcatttatg gaattattgt catttccgt aggatgatga agtcccgat gatggtcatt ggctttgcca ttggctatgg gtgccattg atcattgtgt tcaatacagt tgcatacaca gagccagaga acggctacat gagactgag gcctgttggc ttaactggga caataccaaa gcccttttag cattggcat cccgggttc gtcattgtg ctgtaaatct gattgtggtt ttgggttgtg ctgtcaaac tcaggggccc tctattggca gtcccaagtc tccaggatgtg gtcataatta tgaggatcag caaaatgtt gccatcctca ctccactgt gggactgacc tgggggtttg gaatagccac tctcatagaa ggcactcct tgacgttcca tataatttt gccctgtca atgttttcca ggggttttct atcctgtctg ttggaacctat tatggatcac agataaagat atgttttgag gatgggatg tcttcaatga aggggaaatc gagggcagct gagaatgcac cactaggccc accaatgga tctaaatga tgaatcgtca aggatgaaat gctgccccat tttctatgga tgcctcaga ccaagagggg agatccagga gaaagaggcc atggaagca ggctggagt aggaagaatg gtcattgttc cttgggaagac tttctctct tgcaggagt gactcccaag ctcttggtcg gccgaagaa aactgaggat aacatttget gactgggctt taaggagcat gatttatgga cccctaac taccctgccc ctgcaagagg ctggcttctt ggtaaatctt gactagatta agatcaatc tgaagccat tttatggtct </p>	Homo sapiens
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416	30698	G Protein- Coupled Receptor Is30698	CAC27252.1	MMKSOATMI CCLVFFLSTE CSHYRSKIHL KSYSEVANHI LDTRAISNWA FIPNKNASSD P LLQSVNLFAR QLHIHNSEN IVNELFIQTK GFHINHNTSE KSLNFSMSMN NTEDILGMV QIPRQELRKL WPNASQALSI AFPTLGAILR EAHQNVSLP RQVNGVLVSV VLPERLQEI LTFEKINKTR NARAQCVGWH SKRRWDEKA COMMLDIRNE VKRCNYTSV VMSFSILMSS KSMTDKVLDY ITCIGLSVSI LSLVLCLIE ATVWSRVAVT EISYMRHVCV VNIASVLLTA NWFIIGSHF NIKAQDYNMC VAVTFESHFF YLSLFEWMLF KALLIYGIL VIFRRMMKSR MMVIGFAIGY GCPLIIAVTT VAITEPENGY MRPEACWLNV DNTKALLAFA IPAFVIVAVN LIVLVAVN TORPSIGSSK SQDVVIIMRI SKNVAILTPL IGLTWGFGIA TIEGTSLT HIIFALLNAF QGFFILLFET IMDHKIRDAL RMRSSSLKKG SRAENASLG PTNGSKLMNR Q6	ccctggccag ctgggggggctg tagggccctg ctgggcttgg tcgtctttca ctccctgaggc ctgtctgtg gctccatagc tcaagctctcc atcactctgc gtggactctg ggtactttgg acagtggagg ttctgatccaa ttttagtggt aggtttgggg tctgttgggt gagtgtgggt tgccaggagg aagaatgagt ctactttgga gacaattaag ctatggtaag tttcctaag atagggaacg gaagaaagc aagagaactg ttttaatatg tgattatttt agtctatttt agacctggag taaactaatt tagcttctag gatccaaagt tccctatttt gaaacacgga aaaaaaaaa cttgtaggtg ttaactgtttg tgtgtttgag tttactgcac atgtttgtgt ttgtgtatat gtgtctttta aaataactat atataaagaa gatcttggtt gttattttag acataaagca atatatgat ctttcac	Homo sapiens
417	30875	G Protein- Coupled Receptor GPR87/GPR95	NM_023915	ggcacgaggg tttcgttttc atgctttacc agaaaatcca cttccctgcc gaccttagtt A tcaaagctta ttcttaatta gagacaagaa acctgtttca acttgagac accgtatgag gtgaatggac agccagccac caaatgaaa gaaatcaaac caggaataac ctatgtcgaa cccacgctc aatcgctccc aatgttttc tgacagcat ctttgcttac agtgcatac aactgaagaa tggggttcaa ctgacgctt gcaaaattac caaataacga gctgcacggc caagagagtc acaattcagg caacaggagc gacgggccag gaaagaacac caccctcac aatgaatttg acacaattgt ctgcccgtg ctttatctca ttatatgtt ggcaagcatc ttgctgaatg gtttagcagt gtggtatctc ttccacatta ggaataaac cagcttcata ttctatctca aaacataagt ggttgacagc ctcataatga cgtgacatt tccatttcca atagtccatg atgcaggatt tggaccttgg tacttcaagt ttattctctg cagatacact tcagttttgt tttatgcaaa catgtatact tccatcgtgt tccctgggct gataagcatt gatcgtatc tgaagggtgt caagccattt ggggactctc ggaatgacag cataaccttc acgaaggttt tatctgtttg tgtttgggtg atcatggctg ttttgctttt gccaaacatc atcctgacaa atggtcagcc aacaggaggac aatatccatg actgctcaaa acttaaaagt cctttggggg tcaaatggca tacggcagtc acctagtga acagtgtctt gtttgggct gtgctgttga ttctgatcgg atgttacata gccatatcca ggtacatcca caaatccagc aggcaattca taagtcagtc aagccgaaaag cgaatacata accagagcat cagggttctt gtggctgtgt tttttacctg ctttctacca tatcacttgt gcagaattcc ttttactttt agtcacttag acaggctttt agatgaatct gcacaaaaaa tccatattta ctgcaagaa attacacttt tcttgcctgc gtgtaattgt tgcctgggac caataattta cttttctatg tgtaggtcat ttccaagaag gctgttcaaa aaatacaata tcagaaccag gagtgaagc atcagatcac tgcataatgt gagaagatcg gaagtctgca tatattatga ttacactgat	Homo sapiens	

418	30875	G Protein- Coupled Receptor GPR87/GPR95	NP_076404.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtqtaataa aatgtttctt ttcattatcc ttaaaaaaaa aa	Homo sapiens
419	31568	G Protein- Coupled Receptor RE2	NM_007369	gtgagcctatc ttccagtcgt ccagcatgct ctgcccacc cagccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aggagctga gtaatctcac tgaggaggag ggtggcgaag ggggctgcat catcacccag ttcactgcca cattgtcat caccattttt gtctgcctgg gaaactggt catcgtggtc acctgtgaca agaagtccta cctctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaaact tccgtctgtc cgtgtgtgtg ctgctctttg tggtagcag aggcacccg agggaatgga tctttgtgt agtgtgtgtg aactctctctg cctctctcta cctgtgctgc agctctgcca gcatgctaac cctgggggtc attgccatcg accgtacta tgcgtgctgt tacccatagg tgtaccccat gaagatcaca gggaaccggg ctgtgatggc acttgtctac atctggcttc actgctcat cggctgcctg ccaccctgt tgggttggtc atcctggag tttgacagat tcaatggat gttgtgtgtc gtctggcacc gggagctctg ctacacggcc tctgggaca tctgtgtgtc cctctccccc ttcttggtca tgcgtgtgtg ctatggcttc atctcccg tggccagggt caaggcacgc aaggtgcat gtggcacgt cgtcctcgtg gaggaggatg ctacagaggac cgggaggaaag aactccagca cctccacct ccttcacgc agcaggaggga atgccttca ggggtgtgtc tactcggcca accagtcaa agccctcat accatcctgg tggctctgg tgcctcatg gtcacctgg gccctacat ggtgtctac gctctgagg cctctgggg gaaaagctcc gtctcccca gctggagac ttgggccaca tggctgtcct ttgccagcgc tctctgccac ccctgatct atggactctg gaacagaca gttcgcaag aactactgg catgtgcttt gggacccggt attatcgga accatttgt caacagaca ggaactccag gctctcagc atttcaaca ggatcacaga cctgggctcg tccccacacc tcactgcgt catggcaggt ggacagccc tggggcacag cagcagcacg ggggacactg gctcagctg ctcccaggac tcaggtaacc tgcgtgtgtt ataagctct cactgtcgc gtttccctg tgttggttt cccccgctg cggtttccc tgtcaggct caagagctgg cggaggggga tttccacagg tg	Homo sapiens
420	31568	G Protein- Coupled Receptor RE2	NP_031395.1	mslnslsclr kelsnlteee ggggviitq fiaivitif vclgnlviv tlykksylt P lsnkfvfslt lsnflslv lpfvwtssir rewifgvwc nfsallylli ssasmltlg iaidryyavl ypmvypmkit gnravmalvy iwlhsligcl pelfgssve fdefkmcva awhrepqytl fwqiwcalfp flvmlvcygf ifrvarkar kvhcgfwiv eedaortgrk nsststssg srnafoqv ysanoqkali tilvlgafm vtgpyvmvi asealmgkss vpsletwat wlsfasavch pliyglwnkt vrkellgmcf gdryyrepfv qrqtsrlfs isnritdlgl sphltalmag goplghssst gdtgfcscsqd sgnlral atggacacct cccggctcgg tgtgtcctg tcttgcctg tctgtctga gctgggacc A gggggcagct ctcccaggtc tgggtgtgtg ctgaggggct gccccacaca ctgtcattgc	Homo sapiens
421	36534	G Protein- Coupled	NM_003667		Homo sapiens

Receptor
GPR49

gagcccgacg gaagatgtt gctcagggtg gactgctccg acctggggct ctcgagctg
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atgaagtta tctctgtgt ggtagtccca ctctctgcat ttctcaatcc ccttctctac
atcttgttca atctcactt taaggaggat ctggtaggcc tgagaaagca acctacgtc
tggacaagat caaacaccc aagcttgatg tcaattact ctgatgatgt cgaataacag

422	36534	G Protein- Coupled Receptor GPR49	NP_003658.1	<p>tcctgtgact caactcaagc cttggttaacc ttaccagact ccagcatcac ttatgacctg cctccaggtt ccgtgccatc accagcttat ccagtgactg agagtgcca tcttccctct gtggcatttg tccatgtctc ctac</p> <p>PSNLSVFTSY LSLVLIQLAT GSSPRSGVL LRGCPHCHC EPDGRMLLRV DCSDLGLSEL P LQNNQLRHP TEALQNLRS QSLRLDANHI SYVPPSCFSG LHSRLHMLD DNALTEIPVQ AFRSLALQA MTLALNKIHH IPDYAFGNLS SLVLHLNN RIHSLGKKCF DGLHSLETLD LNYYNLDDEP TAIRTLNLK ELGFHSNNIR SIPEKAFVGN PSILTIHFYD NPIQFVGRSA FQHLPELRTL TINGASQITE FPDLTGTANL ESLLTGAQI SSLPQTVCNQ LPNLQVLDLS YNLLEDLPFS SVCQKLQKID LRHNEYEIK VDTFQQLSL RSINLAWNKI AIHPNAFST LPSLIKLDLS SNLSSFPIT GLHGITHLKL TGNHALQSLI SSENPELVK IEMPYAYQCC AFGCENAYK ISNQWNGDN SSMDLHKKD AGMFOQDER DLEDFLLDFE EDLKALHSVQ CSPSPGPFKP CEHLLDGWL I RIGVWTIAVL ALTCAALVTS TVERSPLYIS PIKLLIGVIA AVNMLTGVSS AVLAGVDAFT FGSFARHGA WENGVGCHVI GFLSIFASES SVFLTLAAL ERGFVKYSA KFETKAPFS LKVIILCAL LALTMVAVPL LGSKYGASP LCPLPFGEF STMGYVALI LINSICFLMM TIATKLYCN LDKGDLNIW DCSMVKHIAL LFTNCILNC PVAFLSFSSL INLTFISPEV IKFILLVWP LPACLNPLLY ILFNPFPKED LVSLRKQTYV WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSITYDL PFSVPSPAY PVTESCHLSS VAEVPCL</p>	Homo sapiens
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NM_004736	<p>actagagatg gcggggcgcc tgctctgaag agacctcgcc ggccggcgag gagagagaa A gcgcagcc gcgcgcgcgc ggggcccatg tggggagagag ccgagtcgc tgttgcgcgc gcgcctgta gctgctggac ccgagtgga gtaggggga aacggcagga tgaagtgcg cgagcacctc tccgcgcaca tcactccga gtaggagag caatacatc agtatgagc tttcaaggat atgctgtatt cagctcagga ccaggcacct tctgtggaag ttacagatga ggacacagta aagaggtatt ttgccagtt tgaagagag tttttccaa cctgtgaaa agaacttgcc aaatacaaca cattttattc agagaagctc gcagaggctc agcgcaggtt tgctacactt cagaatgagc ttcatgcatc actggatgca cagaaaagaa gcactgggtg tactacgctg cgacaacgca gaaagccagt cticcacttg tccatgagg aactgtcca acatagaaat attaaagacc ttaaactggc ctccagtgag ttctacctca gtctaactc gtgcagaaac tatcagaatc tgaattttac agggtttoga aaatccctga aaagcatga caagatccctg gaaacatctc gtggagcaga ttggcgagt gctcacgtag agtgggcccc atttatata tgcaagaaaa tcaaccagct tatctctgaa actgaggctg tagtgaccaa tgaacttgaa gatggtgaca gacaaaaggc tatgaagcgt ttacgtgtcc ccccttggg agctgctcag cctgaccacg catggactac ttttagattt ggctattttt ttggaatat catgtgactg aatatlaecc ttgtgcttgc cgtgtattt aaactgaaa catagagaag tatatggccc ttgataagaa tctatcgggg ttgctttctt ctgattgaaat tctttttct actggggcatc aacacgtatg gtggagaca ggctggagta aacatgtac tcatcttga acttaatccg agaagcaatt tgcctcatca acatctcttt gagattgctg gattcctcgg gatattgtgg tgcctgagcc ttctggcatg cttcttttct ccaattagtg tcatcccccac atatgtgtat ccacttgccc ttatgtgatt tatggttttc ttctttata acccaccacaa aactttctac tataaatccc ggttttggct gottaaactg ctgtttcag tatttacagc</p>	Homo sapiens

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 ERVQHRN1KD LKLAFFSEFY SLILLQNYON INFTGFRKIL KHKDKILETS RGADWRVAHV
 EVAPFYTKK INQLISETA VTNLEEDGD RQAMKRLRV PPLGAAQAP AWTFRVGLF
 CGIFIVLNT LVLAAVFKE TDRSIWPLIR IYRGFFLIE FLFLGINTY GWRQAGVNHV
 LIFEINPRSN LSHOHLFEA GFLGIWCLS LLACFFAPIS VIPTYVYPLA LYGFVFFLI
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 WKYNQISILR RPLASQSKA RDTKVLIEDT DDEANT

424 37498 Xenotropic and Polytropic Retrovirus Receptor (XPR1)

Homo sapiens

425	40881	Lung Seven Transmembran e Receptor 2 (L1STR2)	AX073578	agagatggca gtgagcgaga ggagggggct cggccgcggg agccccggg agtgggggca A gcggtactt. ctgggtgctgc tgttgggtgg ctgctccggg cgcattccacc ggctggcgct gacggggag aagcagcgg acatccagct gaacagcttc ggtttctaca ccaatggctc tctggaggtg gacttgagcg. tctcgcggtt ggtcctccgg gagcagaag agaagtcctt gctgggtggg ttcagtctca gccgggttgc gttcggcaga gttcgctctt attcaacccg ggatttccag gactgcctc tccagaaaaa cagtagcagt ttctgggtcc tttctctcat caacaccaag gatctgcagg tccaggtgcy gaagtatga gagcagaaga cgttgtttat ctttcccggt ctctcccggt aagcacctc caaacagggt ctcccgaag cacaggccac agtccccgc aaggtggatg gcggagggac ctctgcagcc agcaagccca agtcaacacc cgcagtatt cagggtccta gtgggaagga caaggacctg gtgttgggct tgagccacct caacaactcc taacaactca gtttccaggt ggtgatcggt tctcaggcg aagaaggcca gtacagcctg aacttccaca actgcaaca ttcagtgcga ggaaggagc atccattcga catcacggtg atgacccgg agaagaacc cgtggtcttc ctgtcggcag cggagatgcc ccttttcaag ctctacatgg tcatgtccgc ctgcttccgt gccgtggca tcttctgggt gtccatctc tgcaggaaca cgtacagcgt ctccaagatc cactggtca tggcggcctt ggccttcacc aagagcatct ctctctctt ccaagcagc aactactact tcatacaag ccaggggccac cccatcgaag gccctgcgt catgtactac atcgacacc tgcgaagg cgccctctc ttcatacca tgcctctgat tggctcaggc tgggcttca tcaagtacgt ctgtcggat aaggagaaga aggtcttgg gatcgtgat cccatgcagg tcttgccaa cgtggcctac atcatcatcg agtcccgga ggaaggcgcc agcactacg tgcgtggaa ggaattttg tctcgttgg acctcatctg ctgtgggtcc atctgttcc ccgtagtctg gtccatccgg catctccagg atgcgtctgg cacagacgg aggtggcag tgaacctggc caagctgaag ctgttccggc attactatgt catggtcatc tgcactgct acttaccctg catcatcgcc atcctgctgc aggtgctgt gcccttcag tggcagtgc tgtaccagct cttgggtggag ggtccacc cgtgctctt cgtgctcag ggtacaaat tccagccacc aggaacaac cgtactctgc agtgcacca ggaaggacgag gaggtgttc agatggagca agtaatgac gactctgggt. tccgggaagg cctctccaaa gtcaacaaaa cagccagcgg gcggaactg ttatgatcac ctccacatct cagaccaaag ggtcgtctc cccagcatt tctcactct gcccttctc cacagcgtat gtggggaggt ggagggggtc catgtggacc aggcgccag ctcccgga ccccggtcc cggacaagcc catttgaag aagatccct tctcccccc aaatatggg cagccctgtc ctaccctgg gacacccct cccttcagc tatgtgtaca ataagacca atctgttgg ct	Homo sapiens
426	40881	Lung Seven Transmembran e Receptor 2 (L1STR2)	CAC28410.1	MAVSERRGLG RGSPAEMGQR LLLVLLGGC SGRIHRLALT GEKRAIQLN SFGYTNGLS P EVELSVLRIG IREAEKSLI VGFSLSRVRS GRVRSYSTRD FQDPLQKNS SSFLVFLIN TKDLQVQRK YGEQKTLFIF PGLPEAPSK PGLPKQATV PRKVDGGTS AASKPSTPA VIQSGSKDK DLVLGLSHLN NSYNFSFHV IGSQAEQY SLNFHCNNS VPGKEHFDI TVMIREKNPD GFLSAEMPL FKLYMMSAC FLAAGIFWS ILCRNTYSVE KIHLMALA FTKSISLLEH SINYFFINSQ GHPIEGLAM YYIAHLKGA LLFTIALIG SGWAFIKYL SDKEKVFGEI VIPQVLAVN AYIIIESREE GASDYVLWKE ILFLVDLIC GAILFPVWS IRHLQDASGT DGKAVNLAK LKLFHYVM VICVYFTRI IAILQVAVP FQWQLYQLL VEGSTLAFFV LTGYKFOPTG NNPLYQLPQE DEEDVQEQV MTDGFRGL SKVNKTASGR	Homo sapiens

427	42697	G Protein- Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
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Homo
sapiens

428 42697 G Protein-
Coupled

Receptor
GPR64

429 45937 KIAA1624 AF376725
Protein

GEIMFOYDKE STVPONQHIT NGLTGVLSL SELKRSELNK TLQTLSEYF IMCATAEQAS
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POPSAPIASS PAIDMPPESE TISSPMPOTH VSGTPPPVKA SFSSPTVSAP ANVNTSAPP
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Homo
sapiens

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431	50847	Neurotensin Receptor type 2	NM_012344		Homo sapiens
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434	53440	G Protein- Coupled Receptor LS53440	CAC38935.1	<p>gitaacattt tggaagacag tattcagaaa aaaaatttcc ttaataaaaa atacaactca gatccttcaa atatgaaact ggttggggaa tctccatttt ttcaatatta tttcttctt tgttttcttg ctacataata ttattatac cctgacttagg ttgtggttgg aggtttatta cttttcattt taccatgcag tccaaatcta aactgcttct acigtatggtt tacagcattc tgagataaga atggtacatc tagagaacat ttgccaaagg cctaaagcacg gcaagggaaa ataaacacag aatataataa aatgagataa tctagcttaa aactataact tctcttcag aactcccaac cacattgat ctcagaaaaa tctgtcttct aaaaagact ctacagagaa gaaataattt ttctcttgga cactagcact taagggggaag attggaagta aagccttgaa aagagtacat ttacctacgt taatgaaagt tgacacactg ttctgagagt ttacacagca tatggaccct gtttttcta tttaatttcc ttatcaacc tttaattagg caaagatat attagttacc tcaattgtag catgggaaaa ttgatgttca gtggggatca gtgaattaaa tggtgtcata caagtataaa aattaaaaaa aaaaagact tcatgcccaa tctcatatga tgtggaagaa ctgttagaga gaccaacagg gtatggggtt agagatttcc agagtcttac attttctaga ggaggtattt aatttctct cactcatcca gtgtgtgatt taggaatttc ctggcaacag aactcatggc tttaatccca ctatgtattg cttattgtcc tggtoacaatt gccaattacc tgtgtcttgg aagaagtgt tcttaggttc accattatgg aagattctta ttcagaaaagt ctgcataggg cttatagcaa gttatttatt tttaaaagt ccataggtga ttctgatagg cagttaggtt agggagccac cagttatgt ggaagtagt gaatggcagg tcttgaagat aacattggcc ttttgagtgt gactgttagc tggaaagtga ggaactcttc aggaccatgc tttatttggg gcttttgcca gtatggaaca gggactttga gaccaggaaa gcaatctgac ttaggcatgg gaatcaggca tttttgcttc tgaggggcta ttaccaaggg ttaatagggt tcatcttcaa caggataga caacagtgtt accaagaaa ctcaattac aaatactaaa acatgtgac atatatgtgg taagtctcat tttcttttcc aatcttcagg ttccctgata tggatttcta taacatgctt tcatccctct ttgtaatgga tatcatattt ggaaatgctt atttaatact tgtatttctt gctggactgt aagcccatga gggcaactgtt tattattgaa tgtcatctct gttcatcatt gactgtctct tgcctcatcat tgaatcccc agcaaatgac ctagaacata atagtgtcta gcaatttcc agccttcttt gagttgggta tgattccttc tgtcctgaac acatagccag gcaatttcc agccttcttt gagttgggta ttattaaaatt ctggccatta ctccaatgt gactggaagt gacatgtgca attctatatac ctggctcata aaacctctcc atgtgcagcc tttcatgttg acattaaatg tgacttggga agctatgtgt tacacagagt aaatcacag aagcctggat ttctgaaaaa actgtgcaga gccaaacctc tgtcatttgc aactccact tgtatttga cgagcaggt ggataagtga aaaataaagt actatttgt caagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa</p> <p>PMYIFLCMLS GIDILISTSS MPKMLAIWF NSTIQFDAC LLQFAIHSL SGMESTVLLA MAFDRYVAIC HPLRHATVLT LPRVTKIGVA AVVRGAALMA PLPFIKQLP FCRSNIISHS YCLHQDMKML ACDDIRNVV YGLIIVISAI GLDILLISFS YLLILKTVLG LTREAQAKAF GTCVSHVCV FIFYVPFGL SMVRFKRR DSPLPVILAN IYLIIVPPVLN PIVGVKTKKE IRQILRLFH VATHASEP</p>	Homo sapiens
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435	54053	Gaba(b) Receptor 2	NM_005458	atggtttccc cgcggaggtc cgggcagcca gggcggccgc cgcgcgcgc accgcgcgc	A	Homo sapiens
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436	54053	Gaba (b) Receptor 2	NP_005449.1	gaaaagacca cctacattaa acagaaccac taccaagagc tcaatgacat cctcaacctg ggaacttca ctgagagcac agatggagga aaggccattt taaaaaatca cctcgatcaa aatccccagc tacagtggaa cacaacagag cctctcgaa catgcaaga tcctatagaa gatataaact ctccagaaca catccagcgt cggctgtccc tccagctccc catctccac cagcctacc tccatccat cggagcgtg gagccagct gtgcagccc ctgctcagc ccaccgcga gcccccgcga cagacatgtg ccaccctct tccgagtcac ggtctcgggc ctgtaa	Homo sapiens
437	55728	ETL protein	NM_022159	MASPRRSQP GRPPPPPPPP ARLLLLLLL LLLPLAPGAW GWARGAPRPP PSSPLSIMG P LMLTKEVAK GSIGRGVLP VELAIEQIRN ESILRPYFELD LRLYTECDN AKGLKAFYDA IKYGNHLMV FGVCPSPVTS IIAESLOGWN LVQLSFAATT PVLADKKKYP YFFRTVPSPDN AVNPAILKLL KHYQWKRVTG LTQDVQRFE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV KKLKGNDVRI ILQFDONMA AKVFCCAYEE NMYGSKYQWI IPGWYEPSSW EQVHTEANSS RCLRNLLAA MEGYIGVDFE PLSSKQIKTI SKTPOQYER EYNNKRSVG PSKFHGYAYD GIWVIKTLQ RAMETIHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTGQVVERNG ERMGTIKFTQ FQDSREVKVG EYNVADTLE IINDTIRFOG SEPPKDKTII LEQLRKISLP LYSILSALTI LGMIMASAFI FFNIKRNQK LKQSSPYNN NLIIGGMLS YASIFLFGLD GSFVSEKTFE TLCTVTRTWIL TVGYTTAFGA MFAKTWRVHA IFKNVMMKKK IIKDQKLLVI VGGMLLIDLC ILICQWAVDP LRRTVEKYSM EPDPAGRDIS IRPILEHCEN THMTIWLIV YAYKGLMLF GCFILAWETRN VSIPALNDSK YIGMSVYNNVG IMCIIGAAVS FLTRDQPNVQ FCIVALVIEF CSTITICLVF VPKLITLRN PDATONRRF QFTONQKKED KTSSTSVTSV NQASTSRLEG LQSENHRLM KITELDKDLE EVMQLQDTP EKTYYIKQNH YQELNDILNL GNFTSTDDG KAILKNHLDQ NPQLQWNTTE PSRTCKDPIE DINSPHIQR RLSLQPLIH HAYLPSIGGV DASCVSPCVS PTASPRHRHV PPSFRVMVSG L gtgaaattta aactccagtc ctgtgggaa aatgctaatt gcactaacac agaaggaagt A tattattgta tgtgtgtacc tggcttcaga tccagcagta accaagacag gttatcact aatgatggaa ccgtctgtat agaaaatgtg aatgcaaaact gccatttaga taatgtctgt atagctgcaa atattaataa aactttaaca aaatcagat ccataaaga accgtggct ttgtacaag agtctctag aaattctgtg acagatcttt caccacaga tataattaca tatatagaaa tattagctga atcatcttca ttactaggtt acaagaaca cactatctca gccaggaca cctttctaa ctcaactctt actgaatttg taaaaccgt gaataattt gttcaagggt atacattgt agttgggac agttatctg tgaatcatag gagaacacat cttcaaaaac tcatgcacac tgttgaaaca gctactttta ggatattcca gagctccaa aagaccacag agttgtatc aaattcaacg gatagctc tcaagtttt cttttttgat tcataaaca tgaacatat tcatctcat atgaatatgg atggagacta cataaatata tttccaaaga gaaaagctgc atagattca atgggcaat ttgcagttgc attttatat tataagagta ttggtcttt gctttcatca tctgcaact tctattgaa acctaaaaat tatgataatt ctgaagagga ggaagagtc atacttctag taatttcagt ctcaatgagc tcaaacccac ccacattata tgaactgaa aaataaact ttacattaag tcatcgaaag gtcacagata ggtataggag tctatgtgca ttttgggaatt actcacctga taccatgaat ggcagctggt ctacagagg ctgtgagctg acatactcaa atgagaccca cacctcatgc cgctgtaac acctgacaca ttttgcaatt ttgatgtcct ctggtccttc cattggtatt	Homo sapiens

438	55728	ETL protein NP_071442.1	MCVPGFRSSS NQDRFITNDG TVCIENVNAN CHLDNVCIAA NINKTLTKIR SIKEPVALLQ P EYRNSVTDL SPTDIIITYIE ILAESSLLG YKNNTISAKD TILSNSTITEF VKTVNNFVQR DTFVWDKLS VNHRRTHLTK LMHTVEQATL RISQSFQKTT EFDTNSTEDIA LKVFFFDSYN MKHIHPHMNM DGDYINIFPK RKAAYDSNGN VAVAFIYKS IGPLLSSSDN FLKPKQNYDN SEEEERVISS VISVMSNP PTLYELEKIT FTLSHRKVID RYRSLCAFWN YSPDTMNGSW SSEGCETYS NETHTSRCRN HLTHFAILMS SGPSIGIKDY NILTRITQLG IISLICLAI CIFTFEFSE IQSTRTTIHK NLCCSLFLAE LVFLVGINTN TNKLFCSIIA GLHLYFFFLAA FAWMCIEGII LYLIVGVYIY NKGFHLKNFY IFGYLSPAVV VGFSALGYR YGTTKVCWL STENFIWFSF IGPACLIILV NLLAFGVIIY KVFRHTAGLK PEVSCFENIR SCARGALLL FLGTTWIFG VLVVHASVU TAYLFTVNSA FQGMFIEFL CVLSRKIQEE YYRLFKNVPC CFGCLR	Homo sapiens
439	56923	Muscarinic acetylcholine Receptor M3	NM_000740 atgacctgc acaataacag tacaacctcg cctttgtttc caaacatcag ctcctcctgg A atacacagcc cctccgatgc agggotgcc ccggaacccg tcactcattt cggcagctac aatgtttctc gagcagctgg caattctcc tctcagacg gtacaccca tgacctctg ggaggtcata cggctcggca agtggctctc atcgcttctt taacgggcat cctggccttg tgaccatca tcggcaacat cctggttaatt gtgtcattta aggtcaacaa gagctgaag	Homo sapiens

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442	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	MAPSHRASQV GFQPTPERPL WRLPPTCRPR RMSVCYRPPG NETLLSWKTS RATGTAFLLL P AALLGLPENG FVWVSLAGWR PARGRPLAAT LVHLHALADG AVLLLTPLFV AFLTROAWPL GQAGCKAVY VCALSMYASV LLTGLLSLQR CLAVTRPFLA PRLRSPALAR RLLAVWLAA LILLAVPAVY RHLWRDRVCQ LCHPSPVHAA AHLSELTITA FVLFPGLMLG CYSVTILARLR GARWGSGRHG YRVGRLLVSAI VLAFLILWAP YHAVNLIQAV AALAPPEGAL AKLGAGQAA RAGTALAFF SSSVNEVLVY FTAGDILLPRA GPRFLTRLFE GSGEARGGGR SREGTMELRT TPQLKVVGQG RGNQDPGGGM EKDGPEWDL	Homo sapiens
443	73584	Cadherin EGF LAG Seven- Pass G-Type Receptor 1 (CELSRI/Flam ingo)	NM_014246	atggcgccgc cgcgcgcgc cgtgtgccc gtgtgtgtgc tctgtgccc cgcgcgcgc A ctgcccgcga tggggctgag agcgccgcgc tgggagcgc gcgtaccgcg cgggaccgcg gccttcgccc tcgggcccgc ctgtacctac gcgtgggcgc cgccttgac gcccgggcg cgcgggagc tgttgagct gggcgcgcgc gggcggtgag caggacgtgc gcggtctgc ggcggggggc gccgctgccc gctgaagtc cgttggtgag ccgcagtcgc cgcgcgcgc ctgagcgcgc gctgcgggc gcgcgcgcac ctcccggt gcggagcccc tgcgggctc tgcggaacgc gtgcccgcct ctgcgggggc ctctgcttcc cgtccccgcg cgtgtgccc gcgcgcgcgc attcggcgc cgcagctccg accaccttac cgcctgcgc ctgcccgcgc cgccccaggc cccgctgtcc cggcgcgcgc atctgctgc cgcgggggcgc ctggttccc ctgctgtgc tgtgcgcct gcggcggcgc gctggcgcgc tccgggtggg actggcgctg gaggcgccca cgcgggggac gccctccgcg tgcctatccc catcgccgc cctgcgcgc aactgcccgc agcccgccgc ggggcggcgc gcgcgggcgc ggcggggcgc gagcggcga gggagcctga agttccgct gcccaactac caggtggcgt tgtttgaga gaaacggcg ggcaccctca tctccagct gcacgcgcac tacaccatcg agggcgagga gagcgcgctg agctattaca tggaggggct gttcgacgag cgtcccggc gctacttccg aatcgactct gcacgggcgc cgtgagcac ggacagcgtg ctggaccgc agaccaagga gacgcacgtc ctcagggtga agcgcgtgga ctacgtacg ccgcgcgcct cggccaccac ctacatcact gtcttggtca agacaccaa cgcacacgc ccggtcttcg agcagtcgga gtaccgcgag cgcgtgcggg agaactgga ggtgggtac gagtggtga ccatccgcgc cagcgaccgc gactgcgcca tcaagccaa ctgctgtac cgcgtgttgg ggggcgctg ggacgtcttc cagctcaacg agactcttg cgtgtgagc acacgggcgc tctggagacc ggagggggcg gccaggtacc agctctgtt ggaggccaa gaccaggggc gcaatccggg ccgctcagt gccacggcca cgtgtacat cgaggtggag gacgagaacg acaactacc ccagttcagc gagcagaact acgtggtcca ggtgcgcgag gactgggggc tcaacacgcg tgtgtgcga gtgcaggcca cggaccggga ccaggccag aacgggcca tcaactacag catctcagc gggaacgtgg ccggccagtt ctacctgac tgcgtgagc ggtacctgga tgtgatcaac cccttgatt tgcaggtatg ccagaaatc tgcgtgagca ttaaggccca ggtgggggc cgccccgc tcataatc ttcagggtg gtgtctgtgc agtgtgtgga tgtcaacgac aacgagccta tcttgtgag cagccccctc caggccagc tctggagaa tgtccccctg ggctacccc tgggtgcacat tcaggcggtg gacgcgggtg ctggagagaa cgcccggtg cactatgcc tgggtgacac ggcctccacc ttctggggg gcgcgcgcgc tgggctaaag aatctgcc ccacccctga ctccccctc cagatccaca acagctccgc ttggtacaca gtgtgtgcgc agctggaccg cgaggaggtg gacactaca gcttcgggtt ggagcggtg gaccacgct cgcgcccat gactctctcc accagctgt ccatcacggt gctggacgtg	Homo sapiens

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Cadherin EGF NP_055061.1
LAG Seven-
Pass G-Type
Receptor 1
(CELSR1/Flam
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449	98519	Chemokine (C NM_005283 motif) XC Receptor 1 (CCXCR1)	atggagtcct caggcaaccc agagagcacc acctttttttt actatgacct teagagccag A ccgtgtgaga accaggcctg ggtctttgct accctcgcca ccactgtctt gtactgcctg gtgtttctcc tcagctagt gggcaacagc ctggtctctgt ggtctctggt gaagtatgag agcctggagt cccctaccag catcttcac ctcaacctgt gctctcaga cctgggtgttc gctgcttgtt tgctgtgtg gatctccca taccactggg gctgggtgct gggagacttc ctctgcaaac tctcaatat gatctctcc atcagctctt acagcageat cttcttcctg accatcatga ccataccag ctactgtcg gtagtgagcc cctctccac cctgcgcgtc ccacccctcc gctgcgggt gctgtgacc atggctgtgt ggttagccag catctgttc tccatcctcg acacatctt ccacaaggtg ctttcttcgg gctgtgatta ttcgaaactc acgtgtacc tcaotcctgt ctaccagcac aacctctct tctgtctgc cctggggatt atctgttct gctaagtga gatctcagg acctgttcc gctcacgtc caagcgggc caccgcacgg tcaagctcat cttcgccatc gtggtgctt acttctctcc ctggggtccc tacaacttca cctgtttct gcagagcgtg tticggagcc agatcatcgg gagctgcgag gcaaacagc agtagaata cgcctgctc atctgcgca acctgcctt ctcacactgc tgttttaacc cgtgtctcta tgtcttcgtg ggggtcaagt tccgcacaca cctgaacat gttctccggc agttctggtt ctgcggctg caggcaccca gccagcctc gatccccac tcccctggtg ccttcgcta tgaggcgcc tcttctact ga	Homo sapiens
450	98519	Chemokine (C NP_005274.1 motif) XC Receptor 1 (CCXCR1)	MESSGNPEST TFFYDLSQ PCENQAWFA TLATVLYCL VFLSLVGN LVLWLVKYE P SLESNTNFI LNLCLSDLVF ACLLPWISF YHWGVLGDF LCKLINMIFS ISLYSSIFFL TIMTIHRYLS VNSPLSTLRV PTLRCRVLT MAVWVASILS SILDITFHKV LSSGCDYSEL TWYTSVYQH NLFFLSLGI ILFCYVEILR TLFERSRKR HRTVKLIFAI VWAYFLSWG YNFTLFLOTL FRTQIIRSC AQOLEYALL ICRNLAFSHC CFNPVLYFV GVKFRTHLKH VLRFQFWFCRL QAPSPASIPH SPGAFAYEGA SFY	Homo sapiens
451	130108	G Protein-Coupled Receptor GPR75	gcgatggcga tgaatcctct agtcctgcat catccagagc ggcaggcgag ctggggctcg A gactgcgaga tggaggagg ggcgctgctg gccccggca ggttatctg tcttgggctt cttttgcac atattgctca tctgtgagct gaggccctga ctcactgagt attttggg agcagaagaa gagacattt ctctccgaaa atgaactcaa caggccacct tcagatgcc cccaatgcca cctcgctcca tgtcctcac tcacaggaag gaaacagcac ctctctccag gagggtcttc aggatctcat ccacacagcc accttggga cctgtacttt tctactggc gtcatcttct gcctgggttc ctatggcaac ttcattgtct tcttgcctt cttcgatcca gccttcagga aattcagaac caactttgat ttcattgacc tgaacctgtc cttctgtgac ctcttcattt gtgagtgac agccccatg ttcacctttg tgttattctt cagctcagcc agtagtatcc cggatgcttt ctgcttcact ttcattctca ccaagtccagg ctteatctc atgtctctga agacagtgc agtgatcgcc ctgcacggc tccggatggt gttggggaaa cagcctaac gcacggctc ctttccctgc accgtactcc teacctgtt tctctgggccc accagtttca ccttggccac cttggtacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gtctgattgc tggaaaagg aaagccattt tctctctca tgtgtctgac ttcaccttct gtgtgtgtgt ggtctctgtc tottatctca tgaattgctca gacctgagg aagaacgctc aagtcagaaa gtgccccctt gtaatacag tgatgcttc cagaccacag cctttcatgg ggtccctgt gcaggagggt ggagatccca tccagtgtgc catgcccgt ctgtatagga accagaatta caacaaactg cagcacgttc agaccctgtg atataccaag	Homo sapiens

452	130108 G Protein- Coupled Receptor GPR75	NP_006785.1	<p> agtcccaacc aactgggtcac cctgcagca agccgactcc agctcgtatc agccatcaac ctctccactg ccaaggattc caaagccgtg gtaacctgtg tgatcattgt gctgcagtc ctgggtgtgt gttctccact ggggatttcc ttgggtacagg tgggtctctc cagcaatggg agcttcattc ttaccagtt tgaattgttt gattttactc ttatatattt caagtcagga ttaaaccttt ttatatatto tgggaacagt gagggtctga gaagaaagt gctctgtgtg ctccaatata taggcctggg tttttctgc tgcaaacaaa agactcgact tggagccatg ggaaaaggga acctcgaagt caacagaac aaatcctccc atcatgaac aaactctgcc tacatgttat ctccaagcc acagaagaaa ttbtgtggac aggtttgtgg cccaagtcat tcaaaagaaa gtatgtgtgag tcccaagatc tctgtgtgac atcaacactg tggtcagagc agctcgaccc ccatcaaacac tgggattgaa ccttactaca gcatctataa cagcagccct tccaggagg agagcagccc atgtaactta cagccagtaa actcttttgg atttgccaat tcatatattg acatgcatta tcaacacact aatgacttag tgcaggaata tgacagcaqt tcagccaagc agattccagt cccctccgtt taaagtcatg gaggctatag gatcttatgt aaacagtitt tgtttctgat agtaatggac ttatttctaa cttagatca gtggcggatc aaaacctaca agattcaact gaaaagtgg cagttatggt tttctttcat ctgatgtgtc agtatctgtt gatttgcctt gtagtgtgtt gacatcttaa gatttgatgt gaaagtttta gattttttac cctg </p>	Homo sapiens
453	133117 G Protein- Coupled Receptor RAIG1	NM_003979	<p> gattttttac cctg MNSTGHLQDA PNATSLHVPH SQEGNSTSLQ EGLQDLIHTA TLVCTFLA VIFCLGSYGN P FIVLSEFFD: AFRKRTNED FMILNLSECD LFICGVTPAM FTFVLFFSSA SSIPDAFCFT EHLTSSGFI MSLTKVAVIA LHLRLMVLGQ QPNRTASEFC TVLITLLIWA TSFTLATLAT LKTSKSHLCL PMSSLIAGKG KAILSLYVD FTFCAVAVSV SYIMIAQTLR KNAQVRKCPP VITVDASRPQ FPMGVFVQGG GDPIQCAMPA LYRNQNYNKL QHVQTRGYTK SPNQLVTPAA SRLQLVSAIN LSTADSKAV VTCVIVLSV LVCCPLPLGIS LVQVVLSSNG SFILYQFELF GFTLIFEKSG LNPFIYSRNS AGLRRKVLWC LQYIGLGFEC CKQKTRLRAM GKNLEWRN KSSHETNSA YMLSPKPKK FVDQACGSPH SKESMVSPKI SAGHOCGQS SSTPINTRIE PYYSIYNSSP SQEESSPCNL QPVNSFGFAN SXIAMHYHTT NDLVQEYDST SAKQIPVPSV ataacagcat gaagtgcctt gaaactggaa taggcgtgtc ctctccctcg accctcccc A tccctgtccc tctgtccacc cctcgtcctg tccctccctc cggcagaggc cgcctttata acaactgctc agagtgcag ggcgggagatg ctgtccaaag tctccccag cactgaggag ctgcctgtgt gccctcttgc gcgcgggaag cagcaccacag ttcacggcca acgcttggc actagggtcc agaattggcta caacagtccc tgatgggtgc cgaatggcc tgaatccaa gtactacaga ctttgtgata aggtgaagc ttggggcacc gtccatagaaa cggtgggccac agccggggtt gtacactcg tggccttcat gtcactctc ccatcctcg tctgcaaggt gcaggactcc acagggcga: aaatgctgcc tactcagttt ctctctctcc tgggtgtgtt ggcatcttt ggctcacct tcgccttcat catcgactg gacggagaca cagggccac acgtttcttc ctctttgga tctcttttc catctgttc tccgtcctgc tggctcatgc tgtcagtcgt accaagctcg tccgggggag gaagccctt tccctgttg tgattctggg tctggccgtg ggcttcagcc tagtccagga tgttatcgct attgaatata ttgtctgac catgaatagg accaagtcga atgtcttttc tgagctttcc gctcctcgtc gcaatgaaga cttgtctctc ctgtcacct acgtcctctt ctgatgggg ctgaccttcc tcatgtcctc cttcaccttc tgtgtttctt tcaagggtgt gaagagacat gggggccaca tctacotcac </p>	Homo sapiens

454	133117 G Protein- Coupled Receptor RAIG1	NP_003970.1	gatgtctctc tccattgcca tctgggtggc ctggtacc ctgtccatgc ttcctgactt tgaccgagg tgggatgaca ccatcctcag ctccgcttg gctgccaatg gctgggtggt cctgttggt tatgttagtc cggagttttg gctgtcaca aagcaacgaa accccatgga ttatcctgtt gaggatgctt tctgtaaac tcaactcgtt aagaagagct atggttgga gaacagagcc tacttcaag aggaatac tcaagttttt gaagagacag gggacacgct ctatgcccc tattccacac attttcagct gcagaaccac cctcccaaaa aggaattctc catccacagg gccacgctt ggcgagccc ttacaaagac tatgaagtaa agaaagagg cagctaaact tgcctgaag agtgggacaa atggagccgg gcggagatc tagcgggagc tcaaagggat gtgggggaaa tcttgagct tctgagaaa ctgtacaaga cactacggga acagtttggc tccctccag cctcaaccac aattcttcca tgcggggct gatgtggct agtaagactc cagttcttag aggcgtgta gtatittttt tttttgtct catccttgg atacttctt taagtggag tctcaggcaa ctcaagtta gaccttact cttttgttt gtttttgaa acaggatctt gctctgtcac ccaggcttga gtgcagtgg gcgacacag ccagtgtag cctcgaccac ctgtgtctca gcaatcctcc catctccatc tcccaaatg ctgggatgac aggcgtgag cacagctccc agcctaggcc cttaactttg ctgttatttt ccatggacta aggtctggt catctgagct cagctggct cacacagctc tagggcctg ctctctaac tcacagtgg tttgtgagg ctctgtggc cagagcagac ctgcatact gagcaaaaat agcaaaagcc tctctcagcc cactggcctg aatctacact ggaagcaaac ttgtggcac cccgctccc caaccctct tgcctgggta ggagaggcta aagatcaccc taaatctact catctctota gtgtgctc acatgggctc tcagcagctc cccagacca attcacaggt caccctctc ttcttgact gtcccaaac ttgctgtcaa ttccgagatc taatctccc ctacgctctg ccaggaattc ttctcagact cactagcaca agcccggtg ctctctgtca ggagaatttg tagatcattc tcactcaaa ttcctggggc tgatactct ctcatctgc acccaacct ctgtaaaatg attaacgca ttacggctg cattctgtaa gtggcatgg tctcctaag gagagtggt cattgtataa taagtattc acctgagtat gcaataaaga tctggtggc actcttcat ggtgtggca gcaaaaaa aaaaaa RRMLPTQFL FLGLVGLFG LTFPIIGLD GSTGTRFFL FGILFICFS CLLAHVSIT KIVRGKPLS LIVILGLAVG FSIQDVIAI EYIVLTWRT NVNFSLSA PRNEDFVLL LTYVLFMAL TFLMSSTFC GSFTGWKRHG AHYLTMLLS IAIWAWITL LMLPDFDRW DDTILSSALA ANGWVFLAY VSPEFWLLTK QRNPMDYPVE DAFCKPOLVK KSYGVENRAY SQEITQGE ETGDTLYAPY STHFQLQNP PQKFSIPRA HAWPSYKDY EVKKEGS atggggacct gtgacatgt gactgaagcc aatatctcat ctggccctga gagcaacc A acgggcatca cagcctctc catgccacc ggcagctgg cactggggc accagctac ctggccctgg tgcgtgtggc cgtgacgggt aatgccatgc tcatctgat catcctggc catcgaggga tgcgcacagt caccactac ttcatctat atctggcgt ggtgacctc tgcatggctg ccttcaatgc cgcctcaac ttgtctcat ccagccaca catctggtac tttggcgtg ccttctgcta ctccagaac ctctcccca tcaagccat gttgtcagc atctactcca tgaccgcat tctgcccag aggtacatgg ccactgtcca cccctccag cctcggttt cagctccag caccaggcg gttattgctg gcactggt ggtggctctc gcctggcct cccctcagt cttctactcc accgtacca tggaccaggg tggccaccaag	Homo sapiens
455	152198 Tachykinin Receptor 2	NM_001057		Homo sapiens

329/448

458

152201 Thyrotropin
Receptor

NP_000360.1

MRPADLLQLV

ggctctctg ggcaatgtct ttgtctgtct tattctctc accagccact acaaatgtgaa
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gtctctcatc gctctctgtag acctctacac tcaactctgag tactacaacc atgccatcga
ctggaagaca ggccctgggt geaacagggc tggttcttc actgtctttg caagcgagtt
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aaccccaag aagcaaggcc aaatctcaga agagtatatg caaacggtt tgtaagttaa
cactacacta ctcaaatagg taggggaact tacaataaa tagtttcttg aatatgcatt
ccaatcccat

Homo
sapiens

459

152245 C-C
Chemokine
Receptor_2

NM_000648

caggactgcc tgagacaaag cacagctga acagagaaag tggattgaac aaggacgeat A
ttccccagta catccacaac atgtgtcca catctgttc tcggtttatc agaaatacca
acgagagcgg tgaagaagtc accactttt ttgattatga ttacgttgct cctgtcata
aatitgagt gaagcaaat gggcccaac tcttgcctcc gctctactcg cctgtgttca
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ctctccatt tggggtcac tctgtgcaa atgagtgggt ctttgggaat gcaatgtgca
aattattcac agggctgtat cacatcggtt attttggcgg aatcttcttc atcatcctc
tgacaatcga tagatacctg gctattgtcc atgtgtgtt tgcttataaa gcaggagcg

Homo
sapiens

460	152245 C-C	NP_000639.1	Chemokine Receptor 2	<p> tcaaccttgg gggtgtgaca agtgtgatca cctggttggt ggctgtgtttt gcttctgtcc caggaatcat ctttactaaa tgcagaaaag aagattctgt ttatgtctgtt ggccttattt ttccacaggg atggaataat ttccacacaa taatggggaa caatttgggg cgtgtcctgc cgctgctcat catggtcatc tgcactcgg gaatcctgaa aacctggtt cgtgtgcgaa acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gtttactttc tcttctggac tccctataac atgtcattc tctgaacac ctccaggaa ttcttcggcc tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg ggatgactca ctgctgcac aatcccatca tctatgctt cgttggggag aagttcagaa ggatctctc gggttcttc cgaagacaca ttcccaagc ctctgcaca caatgtccag ttttctacag ggagacatg gatggagtga ttccacaaa cagccttcc actggggagc aggaagtctc ggctggttta taaaacgagg agcagttta ttgtgttta taaagggaga taacaatctg tatataacaa caaacttcaa gggttggttg aacaatagaa acctgtaaag caggtgccca ggaacctcag ggctgtgtg actaatcac actatgtcac ccaatgcata tccaacatgt gctcaggaa taatccagaa aaactgtggg tagagacttt gactctccag aaagctcatc tcaactcctg aaaaatgcct cattacttg tgctaactc ctttttctag tcttcataat ttcttcaac aatctctgat tctgtcaatg tcttgaatc aagggccagc tgaggtgtaa gaagagaatg tgacaggcac agatgaatgg gagtgaggga tagtgggggc agggctgaga ggagaaggag ggagacatga gcatggctga gctggacaa agacaaaggt gagcaaaagg ctcacgcatt cagccaggag atgatactgg tcttagacc catctgccac gtgtatttaa ccttgaaggg ttccaccagg cagggagagt ttgggaactg caataaacctg ggagttttgg tggagtcga tgattctctt ttgcataagt gcatgacata ttttgcttt attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct ccattgttca gatgcttctt aggccacac cccctgcta aaaaattcaga aaattttgt ttataaaaga tgattatct atgatattgta atatatatga tatgcaatat aaaatttag tbtataaaaga tntnesgeev ttfddydyga pchfdvkvqi gaoillpplys lvfifgfvgn p mlvllilinc kklkcltdiy llnlaisdlil flitlplwah saanewvfgn amcklftgly higyfggiff iilltidryl aiwhavfalk artvtfgvvt svitwlvavf asvpgliftk cokedsyvvc gpyfprgwnn fhtimrnlg lvplllmvi cysgilktll rcnekkrrhr avrviftimi vyflewtpyn ivillntfpe feglsncest sqldqatqvt etlgnthcci npiiyafvge kerrylsvff rkhtkreck qcpvfyrvtv dgvststnps tgeqevsagl cagaaatcct cagctccac agaatgaac acgttttcta aaataaagtc aagccaagct a gtcctacccc aagaaaatc ctagaagca aagtggtgctt ccttctgag gccccagcca ggtgtgtcca accgtaggag ccacagctca gagatcagag tgaacttaaca gttagagggc acttgatgag taagtgtaa taggaaacc aagtcagacg acactccct tctgagtccc aacatgtct acatctggag aagacagat aagtcaggg atcacagact tctgattaga gactgccagg gtccataga ccaagcggg gtcccagggt tgaagctggg gttgaggatc cattatctga attttccact ctatgatga tcacttttat tcttttccct ttcttgaatt tatttccatt tgtttattcc taattccct ggtagatcac ctgtgaaagc ttgcaactgt ctgataagaa taaaggggga aggattgac ttacacagag agacttcaga aggagctctc tctaggagca aatgggggc aatccagtgg gaaggaggtg gaagactgca cttgagctgc gtttggacaa caggcacaca atctttactt acttttcagg ctgctttgag gt </p>	Homo sapiens
461	152299 Interleukin-8 Receptor A	IG5459		<p> tcaaccttgg gggtgtgaca agtgtgatca cctggttggt ggctgtgtttt gcttctgtcc caggaatcat ctttactaaa tgcagaaaag aagattctgt ttatgtctgtt ggccttattt ttccacaggg atggaataat ttccacacaa taatggggaa caatttgggg cgtgtcctgc cgctgctcat catggtcatc tgcactcgg gaatcctgaa aacctggtt cgtgtgcgaa acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gtttactttc tcttctggac tccctataac atgtcattc tctgaacac ctccaggaa ttcttcggcc tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg ggatgactca ctgctgcac aatcccatca tctatgctt cgttggggag aagttcagaa ggatctctc gggttcttc cgaagacaca ttcccaagc ctctgcaca caatgtccag ttttctacag ggagacatg gatggagtga ttccacaaa cagccttcc actggggagc aggaagtctc ggctggttta taaaacgagg agcagttta ttgtgttta taaagggaga taacaatctg tatataacaa caaacttcaa gggttggttg aacaatagaa acctgtaaag caggtgccca ggaacctcag ggctgtgtg actaatcac actatgtcac ccaatgcata tccaacatgt gctcaggaa taatccagaa aaactgtggg tagagacttt gactctccag aaagctcatc tcaactcctg aaaaatgcct cattacttg tgctaactc ctttttctag tcttcataat ttcttcaac aatctctgat tctgtcaatg tcttgaatc aagggccagc tgaggtgtaa gaagagaatg tgacaggcac agatgaatgg gagtgaggga tagtgggggc agggctgaga ggagaaggag ggagacatga gcatggctga gctggacaa agacaaaggt gagcaaaagg ctcacgcatt cagccaggag atgatactgg tcttagacc catctgccac gtgtatttaa ccttgaaggg ttccaccagg cagggagagt ttgggaactg caataaacctg ggagttttgg tggagtcga tgattctctt ttgcataagt gcatgacata ttttgcttt attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct ccattgttca gatgcttctt aggccacac cccctgcta aaaaattcaga aaattttgt ttataaaaga tgattatct atgatattgta atatatatga tatgcaatat aaaatttag tbtataaaaga tntnesgeev ttfddydyga pchfdvkvqi gaoillpplys lvfifgfvgn p mlvllilinc kklkcltdiy llnlaisdlil flitlplwah saanewvfgn amcklftgly higyfggiff iilltidryl aiwhavfalk artvtfgvvt svitwlvavf asvpgliftk cokedsyvvc gpyfprgwnn fhtimrnlg lvplllmvi cysgilktll rcnekkrrhr avrviftimi vyflewtpyn ivillntfpe feglsncest sqldqatqvt etlgnthcci npiiyafvge kerrylsvff rkhtkreck qcpvfyrvtv dgvststnps tgeqevsagl cagaaatcct cagctccac agaatgaac acgttttcta aaataaagtc aagccaagct a gtcctacccc aagaaaatc ctagaagca aagtggtgctt ccttctgag gccccagcca ggtgtgtcca accgtaggag ccacagctca gagatcagag tgaacttaaca gttagagggc acttgatgag taagtgtaa taggaaacc aagtcagacg acactccct tctgagtccc aacatgtct acatctggag aagacagat aagtcaggg atcacagact tctgattaga gactgccagg gtccataga ccaagcggg gtcccagggt tgaagctggg gttgaggatc cattatctga attttccact ctatgatga tcacttttat tcttttccct ttcttgaatt tatttccatt tgtttattcc taattccct ggtagatcac ctgtgaaagc ttgcaactgt ctgataagaa taaaggggga aggattgac ttacacagag agacttcaga aggagctctc tctaggagca aatgggggc aatccagtgg gaaggaggtg gaagactgca cttgagctgc gtttggacaa caggcacaca atctttactt acttttcagg ctgctttgag gt </p>	Homo sapiens

462 152299 Interleukin- 8 Receptor A NM_000634 Homo sapiens

agctgttaag tcactctgat ctctgactgc agtctctact gttgacaca cctggccggt A
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cagccctgt atgtagaaa ctgagacact caacaagt atgtgatca tgccttatgc
cctagtgttc ctgctgagcc ttgtgggaaa ctccctgtgt atgttggtca tttatatacag
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463	152299 Interleukin-8 Receptor.A	NP_000625.1	MSNITDPQW DFDDLNETGM PPAEDYSPC MLETFELNKY VVIAYALVF LLSLGNLSV P MLVILYSRVG RSVTDVYLIN LALADLLFAL TLPWAASKV NGWIFGTFLC KVSLLKEVN FVSGILLIAC ISVDRYLAIV HATRTLQKR HLKVEVCLGC WGLSMNLSLP FFLFRQAYHP NNSSPVCYEV LGNDTAKWRM VLRLPHTFG FIVPLEVLMF CYGFTLRTLF KAHMGQKHRA MRVIFAVVLI FLICWLPYNL VLLADTLMRT QVIOESCERR NNIGRALDAT EILGFLHSL NPIIYAFIQ NFRHGLFKIL AMHGLVSKRF LARHVTSTY SSSNVSSNL cctgagccct cctcatggat ggtgcaaacg tgacatcatt tgtgttgag gaaccacga A acatctcaac tggcaggaac gcctcagtcg ggaatgcaca tcggcaaatc cccatcgtgc actgggtcat tatgagcatc tcccagtggt ggtttgtga gaatgggatt ctctctggt tctgtgctt cggatgaga agaaatccct tcactgtcta catcacccac ctgtctatcg cagacatctc actgctcttc tgtattttca tctgtctat cgaactatgct ttagattatg agctttcttc tggccattac tacacaattg tcacattatc agtgactttt ctgtttggct acaacacggg cctctatctg ctgacggcca ttagtgtgga gagtgccctg tcagtccttc accctatctg gtaccgatgc catcgccca agtaccagtc ggcattggctc tgtgcccttc tgtgggtctc ttcttgcttg gtgaccacca tggagtatgt catgtgcac gacagagaag aagagagtca ctctcggaat gactgccgag cagtcacatc ctttatagcc atctgagct tctgtgtctt caegccctc atgtgtgtgt ccagcccatc cttgtgtgtg aagatccgga agaacacgtg ggttcccatc tctccaagc ttacatagat cateatggtc accatcatta tattctcatc ctctgctatg cccatgagac tctttacat gctgtactat gagtattggt cgacctttgg gaaactacac cacatttccc tgctctctc cacaatcaac agtagcgcca acccttctat ttactcttt gtgggaagca gtaagaagaa gagattcaag gagtccctaa aagttgtctc gaccagggtc tcaaaagatg aaatgaacc tcggcgccag aaagacaatt gtaatacggg cacagttgag actgtcgtct aagaactgtg agggaggtgt tggataaaaa tggtggaaca caggtcattt ttagtttgtg cftggaatat gacttaagta tctctaaat gtgatacaga agaacatctc atccatctg catgagatc taattaatga tgaaa 158822 Mas Proto-Oncogene	NP_002368.1	MRNPFTVYI THLSIADISL LFCIFILSID YALDYELSSG HYTIVTISV TFLFGYNTGL YLTASIVER CLSVLYPIWY RCHRPKYQSA LVCALLWALS CLVTTMEYVM CIDREEESH RNDGRAVIF IAILSFLVFT PLMLVSTIL VKIRNTWA SHSKLYIVI MVTIIIFLIF AMPMLLYLL YYEYWTSTFGN LHHISLLFST INSSANPFIY FFGSSKKKR FKESLKVLT RAFKDEMOPR RQKDCNTVT VETVV atgctgccgg actggaagag ctctctgac ctcatggctt acatcatact ctctctcaat A ggctctccctg ccaactcctc ggccctgcgg gcctttgtgg ggcggatccg ccagcccag cctgcacctg tgcacatcct cctgctgagc ctgacgtgtg ccgacctcct cctgctgctg ctgctgccct tcaagatcat cgaggctgcg tcgaactcc gctggtaact gcccaaggct gtctggccc tcacaggttt tggcttctac agcagatctc actgcagcac gtgctcctg gggggcatca gcatcgagcg ctactggga gtggctttcc ccgtgcagta caagctctc cgccggcctc tgtatggagt gattgcagct ctgggtggct gggttatgtc ctttggtcac tgaccatcgt tgatcatcgt tcaatacttg aacacgactg agcaggtcag aagtggaat	Homo sapiens
464	158822 Mas Proto-Oncogene	NM_002377		Homo sapiens		
465	158822 Mas Proto-Oncogene	NP_002368.1		Homo sapiens		
466	159152 G Protein-Coupled Receptor GPR43	NM_005306		Homo sapiens		

Homo
sapiens

P

NP_005297.1

159152

G Protein-

Coupled

Receptor

GR43

467

gaaattacct gctacagagaa cttcaccgat aaccagttgg acgtggtgct gccgtgcgg
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RRPLYGVIAA LVAWNMSEGH CTIVIVQYL NTFEQVRSNG EITCVENFTD NQLDVVLVPR
LELCIVLEFI PMAVTIECYW RFWMILSQP LVGAQRRRRA VGLAVVTLLN FLVCFGPYNY
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ggcccaaggc ggccccctcc gcccttccc actcaccocg gcagagcgg ggacagagg

Homo
sapiens

A

NM_004624

159973

Vasoactive

Intestinal

Polypeptide

Receptor 1

468

469	159973 Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2 MRPPSLPAR WLCVLGALA WALGPAGQA ARLOEQEDYV QMIEVQHKOC LEEAQLNET P	IGSKMWDNL TCWATPRGQ VVVLACPLIF KLFSSIOGRN VBRCTDEGW THLEPGPYPI ACGLDDKAAS LDEQTMFYG SVKTYGTIGY GLSLATLIVA TAILSIFRKL HCTRNYIHMH LFISFILRAA AVFINDLALF DSGESDQCE GSVGCKAAMV FFOYCVMANF FWLIVEGLYL YTLAVSFFS ERKYFWGYIL IGWVPSTFT MWWTIARIHF EDYGCWDTIN SSLWMIKGP ILTSILVNET LFICILIRILL QKLRPEDIRK SDSSPSRLA RSTLLILPLF GVHYIMEAFF PDNEKPEVKM VFELVVGSEFQ GFVAILYCF LINGEVOAELR RWRWRHLOG VLGWNPKYRH PSGGSNGATC STQVSMLTRV SPGARSSSF QAEVSLV	Homo sapiens
470	160040 Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	cgtgccccgg cggggccagg cccggccccg ggctcgaggg ctgccccccg cccctgggtc tctgggtccg acactcctag agaaccgagc cctagagcct gctggagcgg ttctagcaaa gtgagagaga tgggagctcc tctcctggag gattgcaggt ggaactcagt cattagactc ctctccaaa ggcctccctac gccaatcaag ggcaaaaagt ctacatactt tcactctgac tctgccccct gctggctctt ctgcccattt ggaggaagc aaccgtgtga tctcaaaaca acactgggtg gactcgagg cagaaaggtt ctgccccggg aaggtcacca gcaccaaac cacggtagt cctgaattt caccattgct gtcaagtcc ttgggttaa gcattaccac tcaggcattt gactgaagat gcagctcact accctattct ctctttacgc ttagtattca gctttttaaa gtgggttatt ctggagtttt tgtttggaga gcacacctat cttagtgggt ccccaccgaa gtggactggc cctgggttca gtctgtggg aggacgtgac aaccaagga ctgagggact ctgaagcctc tgggaatga gaaggcagcc accagcgaat gctagggtctc ggactaagcc tacctgctct ccaagtctca gtggttcaat ctgtcaagtg ggtctctgtca caccagccat acttatctct ctgtgctgtg gaagcaacag gaatcaagag ctgcccctct tgtccacca cctatgtgcc aactgttga actaggctca gagatgtgca cccatgggct ctgacagaaa gcagatacct caccctgcta cacatacagg atttgaactc agatctgtct gataggaatg tgaagcagc gactcttact gctaaatttt ggtatctgta accagccaga tcctcttggt tatttgttta ccaactgtat tattaatgcc attatcttga attccccttg ccaccctacc ctccctggcg tgtggctgag gaggcttcca tctcatgtat catctggata ggagcctgct ggtcacagcc tcctctgtct gcccttcacc ccagtggcca ctacgtctcc taccacacc tctgccagaa gatccctca ggactgcaac aggttggctg acaataaaat gttggcttgg a	Homo sapiens

471	160040	Vasoactive Intestinal Polypeptide Receptor 2	NP_003373.1	<p> MRTLLPPALL TCWLLAPVNS CWRPANVGET VTVPCKVFS TFYIIVKAIY TLGYSVSLMS DVLVSSSGTL HCPDQSSSW FLAYLLIGWG LPTVICAWT SIIRILLQKL TSPDVGGNDQ LCLGSFQGLV VAVLYCFINS FHRASRAQSF LQTETSVI </p>	<p> IHPCECRFHE IQBEETKCTE KNCTSDGWE TFPDEFVACG FRKLHCTRNY IHLNLFSLFI YCIMANFFWL LVEGLYLHTL CWDNDHSVP WWVIRIPILI LLILPLFVGH YMVFAVFPIS RDRVCGSSSF SHNGSEGALQ </p>	Homo sapiens
472	160055	Motilin Receptor (GPR38)	NM_001507	<p> atgggagcgc cctggaaacg gcgctgcccgc cttgcgacga gtgacgcgtg tgtgctctgtg atgctgatcg ggcgctaccg gccgtgtccg acctactcat tcgcggccct ggggtgttcgg tgacactacg ccacgctgct tgccgcccgc tccggcgccg gtgtctctggg ccgtggcgct caggaccccg gcattctcgt cctctgcgct cgtgcgcgcc gggcccgaaga ccgcgagggc cagctggggcg cgctgcgtgt ctgtgcctca gcatcctcta ctgcgaggcc cgccgcctc ttcgtgggtgg ttctggcatt tacataaaca cggagagattc </p>	<p> ccactaaacc ccatacctgg gggtctcct tctccacaa gcccagtcct tccgaaac ggcgcgaggag gccacggtt agatgccccg gcacgctgc aagcgaaaat ggcaagccg ggttcctcct tctccacaa gcccagtcct tccgaaac ggcgcgaggag gccacggtt agatgccccg gcacgctgc aagcgaaaat ggcaagccg ggttcctcct tctccacaa gcccagtcct tccgaaac ggcgcgaggag gccacggtt agatgccccg gcacgctgc </p>	Homo sapiens

473	160055 Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattctatc aaccaatcc tctacaacct catttcaaaag aagtacagag cggcggcctt taaactgctg ctgcgaagga agtccaggcc gagaggcttc cacagaagca gggacactgc ggggaagtt gcagggaca ctggaggaga cagggtgggc tacaccaga caagcgctaa cgtgaagacg atggataa MGSPWNQSDG PEGAREPPWP ALPPCDERRC SPFPLGALVP VTAVCLCLFV VGVSGNVTV P MLIGRYRDMR TTNNLYLGM AVSDLLILG LPFDLYRLMR SRPWVFGPLL CRSLYVGGG CTYATILHMT ALSVERYLAI CRPLRARVIV TRRRVALIA VIMAVALLSA GFELFLVGE QDPGISVVPQ INGTARIASS PLASSPPLWL SRAPPSPSPS GPETAEEAAL FSRECRPSPA QLGALRVMLW VTTAYFFLPF LCLSLYGLI GRELWSSRRP LRGPAAAGRE RHRQTVRVL LWVLAFLIC WLPFHVGRII YINTEDSRM YFSQYFNIVA LQLFYLASI NPILYNLISK KYRAAAFKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG NM_005303	Homo sapiens
474	160059 G Protein- coupled Receptor GPR40	NM_005303	atggacctgc cccgcagct ctcttcggc ctctatgtgg ccgctttgc gctgggcttc A ccgctcaacg tectggccat cggaggcgcg acggccacg cccgcttcg tctacacct agcctgtct acgacctga cctggctgc tccgacctgc tctgacagt ctctgccc ctgaagcgg tggaggcgt agctccggg gctggcctc tgcggcctc gctgtgccc gtcttcgcg tggcccaatt ctcccaactc tatccggcg gggcttctt cggcggcgtg agtgcaggc gtacctggg agcagcctc ccttgggt accaagcctt cggaggcgg tgctattct tgggggtgtg cggcccatc tggccctcg tctgtgtca cctgggtctg gtctttgggt tggaggctcc aggaggctgg ctggaccaca gcaacacctc cctgggcatc aacacacgg tcaacggctc tccggtctgc ctggagcct gggaccggc ctctgcggc ccggcccgct taagcctctc tctctgtc ggcactggc cgtccggcc tgacgcacag tgctacgtg gctgcctcg ggcactggc cgtccggcc tgacgcacag gggaaagctg cgggcccgt ggttgcccg cggggccctc ctacgctgc tgctctggt aggacctac aacgcctcca acgtggccag ctctctgtac cccaatctag gaggctcctg gcgaaagctg gggctcatca cgggtgctg gagtgtggtg cttaatccgc tggtagcgg ttaattgga aggggtctctg gcctgaagac agtgtgtgcg gcaagaacgc aagggggcaa gtcccaagaag taa	Homo sapiens
475	160059 G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQISFG LYVAAEALGF PLNVLAIRGA TAHARLRLTP SILVYALNLGC SDLLITVSLP P LKAVEALASG AWELPASLCP VFAVAHFFPL YAGGGFLAAL SAGRYLGAAL PLGYQAFRRP CYSWGVCAAI WALVLCILGL VEGLEAPGGW LDHSNTSLGI NTPVNGSPVC LEAWDPASAG PARFSLSLIL FELPLAITAF CYVGCIRALA RSLGTHRRKL RAAWVAGGAL LTLLCVGPY NASNVASFLY PNLGGSWRKL GLITGAWSVV INPLVTGYLG RGPGLKTVCA ARTQGGKSQK atgcacacg tggctacgtc cggaccacac gcgtcctggg gggcacggc caacgcctcc A ggctgcccgg gctgtggcg caagcctcg gacggcccg tcccttgccc gcgggccgtg gacgctggc tctgcccgt ctctctcg gctgtatgc tgctgggctg ggtggggaac tcgctggta tcacgtcat ctgcgccac aagcagatgc ggaccgtgac caacttctac atcgccaacc tggcgccac ggaagtgaac tctcctctgt gctgctgccc ctccacggc ctgctgtacc cgtgcccgg ctgggtgctg ggcacttca tgtgcaagtt cgtcaactac atccagcagg tctcgttga ggcacgtgt gccacttga ccgccatgag tgtggaccgc tggtacgtga cgtgttccc gttgcgcgc ctgcacggcc gacgcgccg cctggcgtg gctgtcagcc tcagcatctg gtaggctct gcgcggtgt ctgcgcgggt gctcgcctg	Homo sapiens
476	160189 G Protein- Coupled Receptor GPR54	NM_032551		Homo sapiens

477	160189 G Protein- Coupled Receptor GPR54	NP_115940.1	<p>caccgcctgt caccggggcc ggcgccttac tgcaagttag ccttcccag ccgcgcctg gagcgccct tgcactgtt caactctgt ggcgtgtacc tgctgcgct gctcgcacc tgccctgt atgcggccat gctgcgccac ctggcgccg tgccgtgctg cccgcgcacc gcccagagc cctgcaggg gaagtgctg gcagagcgcg caggcgccgt gcgggccaag gtctcgccg tgggtggccg cgtgggtctg ctcttcgctg cctgtcggg ccccatcag ctgttctgg tgctgcaggc gctgggccc gcggctctt ggaaccacg cagctacgcc gcctacgcg ttaagacctg ggtcactgc atgtcctaca gaaactccg gctgaaccg ctgtctacg ccttctggg ctgcacttc cgaaggcct tccgcgcgt ctgcccctgc gcgcgcgcc gcccccgcg ccccgccg cccgacctt cggaccccg agcccccac gcggagctg accgctggg gtccaccgg gcccccga gggcgagaa gccaggagc agtgggctg ccgcgcggg gctgtgcgc ctgggggag aaacgccc tctctga MHTVATSGPN ASWGPANAS GCPGCGANAS DGPVSPRAV DAWLVLPFA AIMLLGLVGN P SLVIYVTCRH KPMRTVNFY IANLAATDVT FLCCVPFTA LLYPLGMVL GDFMCKFVNY IQQVSQATC ATLTAMSDR WYTVFPRA LHRTPRLAL AVLSIWVGS AAVSAPVIAL HRLSPGPRAY CSEAFPSRAL ERAFALYNLL ALYLLPLLAT CACYAAMLRH LGRVAVRPAP ADSAHQGV L AERAGAVRAK VSRIVAANVL LEACWGPQ LFLVLOALGP AGSWHPRSYA AYALKTWAHC MSYSNSALNP LLYAFLGSHF RQAFRVCP APRRRPRRR PGPSPDPAAPH AELHRLGSHP APARAQKPS SGLAARGLCV LGEDNAPL CCGGGCGCAC GTGCTGTGTG CTGCGCGCCT ACCTGTCAT GCATTCAT GCATGGCTG A ACCTATCATG AGACCTCTCT GTGCTCACA CTGTATGGA CCCACATCTG CCTACACTGC CACCTGGTAC CAACCTCTCT ACTTCTCTA TGATGTATC TGACTGCTGC TACATGCTAG ACTGCGCTAT TCACCGGATC CTGACAACT TTATCAGCCA GACTGCGGG GCGGGCTGCG ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGGGG GCACANGCG CTCCTCTCC TTCTGTGACA CCCAGCGTA CATATCAT ACCAGGGTG ATAGCAGAC TGCTGCGAGC AACCCGCCAC CTGCGAGCA AGCTGAGCT TTCAGGCACA CCATTGCTC GCAAAGACTT GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T</p> <p>cagcctctc acagctccc atagcctgga cctgcggcc ctcctccag gaccgaggg A ctcccaagg aaactcagg gtgtgctggt cccaatgtca gtgaaccca gctggggcc tgccctcg gagggggtca ccgagtgcc taccagtgc ctggagaga tccacaactg gaccgagctg cttgacctt tcaaccacac tttgtctgag tgccagtggt agctcagcca gagcaccag cgcgtggtcc tcttgccct ctacatggc atgtgtgtg ttgggctggt ggagaacctc ctggtgatat ggcctcaactg gcgcgctca ggcggggcag ggctgatga cctctacac ctcaacatgg caatcgcca cctgggcat gtccgtctc tgcccggtg gatgctggag gtcaacgtg actacacctg gctcggggc agcttctct gccgcttcc tcaactctc tactttgtca acatgtatag cagcatctc ttcctggtg gctcagtg cgacogtat gtcacctca ccagcgctc cccctcttg cagcgttacc agcaccagt gcggcgggcc atgtgtgag gcatctgggt cctctcgcc atcatccc tgccgaggt ggtccacac cagctgggt agggccctga gcccagtgc ctcttcattg cacttttga aacgtacag acctggccc tggcggtgg cctgtccacc acctctgg gcttctgct gcccttccct ctcacacag tcttcaatgt gctgacgccc tgcgggctgc ggcagcagg acaacccaag agccggcgc actgttctg gctgtgccc tactgtgccc tcttctcat</p>	Homo sapiens
478	160202 Adrenomedullin in Receptor (ADMR)	LG6564	<p>cagcctctc acagctccc atagcctgga cctgcggcc ctcctccag gaccgaggg A ctcccaagg aaactcagg gtgtgctggt cccaatgtca gtgaaccca gctggggcc tgccctcg gagggggtca ccgagtgcc taccagtgc ctggagaga tccacaactg gaccgagctg cttgacctt tcaaccacac tttgtctgag tgccagtggt agctcagcca gagcaccag cgcgtggtcc tcttgccct ctacatggc atgtgtgtg ttgggctggt ggagaacctc ctggtgatat ggcctcaactg gcgcgctca ggcggggcag ggctgatga cctctacac ctcaacatgg caatcgcca cctgggcat gtccgtctc tgcccggtg gatgctggag gtcaacgtg actacacctg gctcggggc agcttctct gccgcttcc tcaactctc tactttgtca acatgtatag cagcatctc ttcctggtg gctcagtg cgacogtat gtcacctca ccagcgctc cccctcttg cagcgttacc agcaccagt gcggcgggcc atgtgtgag gcatctgggt cctctcgcc atcatccc tgccgaggt ggtccacac cagctgggt agggccctga gcccagtgc ctcttcattg cacttttga aacgtacag acctggccc tggcggtgg cctgtccacc acctctgg gcttctgct gcccttccct ctcacacag tcttcaatgt gctgacgccc tgcgggctgc ggcagcagg acaacccaag agccggcgc actgttctg gctgtgccc tactgtgccc tcttctcat</p>	Homo sapiens
479	160202 Adrenomedullin in Receptor (ADMR)	NM_007264	<p>cagcctctc acagctccc atagcctgga cctgcggcc ctcctccag gaccgaggg A ctcccaagg aaactcagg gtgtgctggt cccaatgtca gtgaaccca gctggggcc tgccctcg gagggggtca ccgagtgcc taccagtgc ctggagaga tccacaactg gaccgagctg cttgacctt tcaaccacac tttgtctgag tgccagtggt agctcagcca gagcaccag cgcgtggtcc tcttgccct ctacatggc atgtgtgtg ttgggctggt ggagaacctc ctggtgatat ggcctcaactg gcgcgctca ggcggggcag ggctgatga cctctacac ctcaacatgg caatcgcca cctgggcat gtccgtctc tgcccggtg gatgctggag gtcaacgtg actacacctg gctcggggc agcttctct gccgcttcc tcaactctc tactttgtca acatgtatag cagcatctc ttcctggtg gctcagtg cgacogtat gtcacctca ccagcgctc cccctcttg cagcgttacc agcaccagt gcggcgggcc atgtgtgag gcatctgggt cctctcgcc atcatccc tgccgaggt ggtccacac cagctgggt agggccctga gcccagtgc ctcttcattg cacttttga aacgtacag acctggccc tggcggtgg cctgtccacc acctctgg gcttctgct gcccttccct ctcacacag tcttcaatgt gctgacgccc tgcgggctgc ggcagcagg acaacccaag agccggcgc actgttctg gctgtgccc tactgtgccc tcttctcat</p>	Homo sapiens

480	160202 Adrenomedull NP_009195.1 MSVKPSWGGP PSEGVTAVPT SDLGRIHNTL ELLDLFNHTL SECHVELSQS TKRVVLFALY P	Homo sapiens
	in Receptor (ADMR)	
	gtgctggctg ccttatcatg tgacctgct gctgctcaca ctgcatggga ccacatctc cctccactgc cactgtgctc cttctctcta gatgtcattg actgctcttc catgctgcac tggctcaca acccactcct ttacaacttt ttacagccac acttcgggg cgggctcttg aatgctgtag tccattacct tccaaaggac cagaccaagg cgggcacatg cgcctcctt tctctctgtt ccaccagca ttccatcatc atcaccaagg gtgatagcca gctgctga gcagccccc accctgagcc agcctgagc ttccaggcac accattgct tccaaatact tccccactt ctcaccacta gcctcttaca ccagctgag gta	
	LAMEVGLVE NLLVICNWR GSGRAGLMNL YILNMAIDL GIVSLPVM LEVTDYTWL	
	WGSFSCRETH YFYFVNMYS IFFVLCLSD RVTLTSASE SWQRYQHRV RMCAGIWWL	
	SALIPLEW HIQLVEGPER MCLFMAPPET YSTWALASV STILGFLLP FPLITVENVL	
	TACRLRQPG PKSRRHCLLL CAYAVFVVC WLPYHVITLL LTLGTHISL HCHLVHLLYF	
	FYDVIDCFM LHCVINPILY NELSHPFRGR ILNAVHYLP KDQTKAGTCA SSSCSTQHS	
	IIITKGDSP AAAAPHPEPS LSFQAHLLP NTSPISSTQ LTPS	
481	160204 G Protein- Coupled Receptor RTA	Homo sapiens
	atgcggtgtc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A	
	tattttccaa ggtcccgccg cgcgtccgct gctggcctgc tgcgccggcg ggtccgccc	
	ccggaggcgg gactcacagg aagagccctc cacaagaaga ggcctcggcg gatcaggaca	
	gtgcagggtg ggtgtgaga ctggtgagct gccagcagg gccagagcc gcatggcctt	
	gagatggctg gaaactgctc ctgggaggcc catcccgga acaggaaacag gatgtccct	
	ggctgagcg aggcgccga actctacagc cggggcttcc tgaccatga cagatcgcg	
	atgctgccg ctccggcctt catgaactac atctctctgc tctctgctt gttggcctg	
	gtgggcaacg ggtgtgtcct ctggtttttc ggcttctca tcaagaggaa ccccttctc	
	atctacttcc tgcactggc cagcgcgat gtgggtacc tcttcagcaa ggcggtgttc	
	tccatctga aacggggggg ctctctggc agtttggcg actacatcg caggtgtgc	
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	gagcgtcg cctcggtcat ctctcccgcc tgggtactgg cgcggcgcc caagcgcctg	
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	ttctcttct ggtcttcca gatccggcc ccttccctc agtactcac tgactgtgc	
	atctgcata acagcagc caagccatc gttacttcc tggccgggag ggacaagtgc	
	cagcggtgt gggagccgt caggtgtgtc ttccagcggg cctgcggga cggcgtgag	
	ctgggggagg ccggggggcag cagcccaac acagtacca tggagatga gtgtccccc	
	gggaacgct cctgagact cagcgtctg aggagcagg ggcaggaaag ggcctcaaag	
	accttggc ttgggacagg aatgggacc tgcctctgag tccatacagg agaagaaga	
	tctgttctt ctctcgggc ctcttctcc ctgggctggg gactccagg gtgctggga	
	gactgggag ccaccagca acagacctgt ggcctctg cggctcccc accattctg	
	ctccctaga gactcttgt acagaagtgt ccccgaggtg gggggggccc tcttgcct	
	aggctggtg gtaaaagaga ggaggtcaac acccagccta gccacctctg cctcttgggt	

Homo
sapiens

482 160204 G Protein-
Coupled
Receptor RTA CAC39840.1
 cagccctctc tgactgtgtc ccagccagca ccaggccagc agctcctacc ctgcccattca
 gggctgttcc agagattcga tccctcttaag gcattataag tgagcaaatg tgaaggaat
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 acggaagttt tataaagac aaaaatgata tcaataaaca ttttataact tgc
 MAGNCSWEAH PGNRNRCPG LSEAPELYSR GFTIEQIAM LPPAVMNYI FLLLCICGLV P
 GNLVLWFFG FSIKRNPFSI YELHLASADV GYLFSKAVFS ILNTGGFLGT FADYIRSVCR
 VLGLCMFLTG VSLLPVSAE RCASVIFPAW YWRRPKRLS AVVALLWVL SLVTCILHNY
 FCVFLGRGAP GAACRHMDIF LGILFLFLLCC PIMVLPCLAL ILHVECRARR RQSAKLNHV
 ILAMVSVFLV SSIYLGIDWF LEWVFOIPAP FPEYVTDLCI CINSKAPIV YFLAGRDKSQ
 RLWEPRLRVF QRALRDGAEL GRAGGSTPNT VTMEMQCPGP NAS

Homo
sapiens

483 160206 G Protein-
Coupled
Receptor
GPR32 NM_001506
 atgaatgggg tctcgagggg gaccagaggc tgagtgaca ggaacctgg ggtctcgaca A
 cgtgatcgct cttgttccag gaagatgaac tcttccgat gcctgtctga ggagtgggg
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 NMGVSEGTG CSDRQPGVLT RDRSCSRKN SSGCLSEEV SLRPTVIL SASIVGVLG P
 NGLVLMVTF RMARTVSTVC FFHLALADM LSLSLPIAMY YIVSQWLLG EWACKLYTF
 VFLSYFASNC LLVFSVDRC ISVLYPVWAL NHRVQRAW LAFGVWLLAA ALCSAHLKFR
 TTRKNGCTH CYLAFTSDNE TAOIWIEGV EGHIGTIGH FLGFLGPLA IIGTCARLIR
 AKLLREGVWV ANRPKRLLLV LVSAFFIWS PFNVLLVHL WRRVNLKEIY HPRMLLIQA
 SFALGCVNSS LNPFLYVFG RDFQEKFFOS LTSALARAFG EEEFLSSCPR GNAPRE
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 gactgctcc agggctggaa tctgtgtc cctgtgtcc cagagccca cgtgtcggc

Homo
sapiens

484 160206 G Protein-
Coupled
Receptor
GPR32 NP_001497.1
 gagaggagt tctgtctatc ctgtccctgt ggcaacgcc cccgggaatg a
 NGLVLMVTF RMARTVSTVC FFHLALADM LSLSLPIAMY YIVSQWLLG EWACKLYTF
 VFLSYFASNC LLVFSVDRC ISVLYPVWAL NHRVQRAW LAFGVWLLAA ALCSAHLKFR
 TTRKNGCTH CYLAFTSDNE TAOIWIEGV EGHIGTIGH FLGFLGPLA IIGTCARLIR
 AKLLREGVWV ANRPKRLLLV LVSAFFIWS PFNVLLVHL WRRVNLKEIY HPRMLLIQA
 SFALGCVNSS LNPFLYVFG RDFQEKFFOS LTSALARAFG EEEFLSSCPR GNAPRE
 cagctccctc ctcccactc tgtctgccc gctgctcttg tctagtctg gtcaggagct A
 gactgctcc agggctggaa tctgtgtc cctgtgtcc cagagccca cgtgtcggc

Homo
sapiens

485 160210 G Protein-
Coupled
Receptor NM_004778
 gagctgctcc agggctggaa tctgtgtc cctgtgtcc cagagccca cgtgtcggc

Receptor
GPR44
(CRTH2)

caacggccaca ctgaagccac ttggcccat cctggagcag atgagcgtc tccagagcca
cagcaacacc agcatcgct acatgcacca cggcgccgtg ctgctgcacg ggctggcctc
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aagcagcagg ggtggcgctg gtcagcact cgggaacact ggggctaate aaatccaatg
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atcacttcca ctgaccccgc tctcttctt ccactggcg tggacttggg gtcagagact
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tggatgaaat gtcagtggaa gaacagatg agaaactctt gagatcttgg tctgtgttt

486	160210 G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	MSANATLKP CPILQNSRL QSHSNTSIRY IDHAAVLHG LASLGLVEN GVILFVVGCR P MRQTVVTTW LHLALSDLLA SASLPFFTYF LAVGHSWELG TTFCKLHSSI FFLNMFPASGF LLSAISLDR C LQWRPFWAQ NHRVTAAAHK VCLVWLAV LNTVYFVFR DTISRLDGR MCYNNVLLN PGPDRDATCN SROAALAVSK FLAFLVPLA IIASHAAVS LRLQHRGRRR PGRFVRLVAA VVAEALCWG PYHVESLLEA RAHANPGLRP LVMRGLPFVT SLAFENSVAN PVLVLTCPD MLRKLRLSLR TVLESVLVDD SELGGAGSSR RRRTSSTARS ASPLALCSRP EPRGPAPLL GWLIGSCAAS PQTGPLNRAL SSTSS	Homo sapiens
487	160212 G Protein-Coupled Receptor GPR52	NM_005684	atgaatgaat ccaggtggac tgaatggagg atcctgaaca tgagcagtg cattgtgaat A gcgtccgagc gtcactctcg cccacttgga tttggccact acagtgtggt ggatgtctgc atcttcgaga cagtggttat tgtgttgctg acattctga ttattgctgg gaatctaaca gttatctttg cctttcattg tgctccactg ttacatcatt atactaccag ctatttcatt cagacgatgg catatgtga tctttcgtt ggagttagct gcttgggtcc tactctgtca cttctccact actccacagg tgtccacagg tcattaaact gccgggtttt tggatatact atctcagttc taaaaagtgt tcttatggca tgtcttgctt gcacagtg ggatcgttat cttgcaataa ccaagcctct tctctacaat caactgggtca ccccctgtgc cttgagaatt tgcattattt tgatctggat ctactcctgc ctaattttct tgccttctt ttttggctgg gggaaacctg gttaccatgg tgacattttt gaatgggtgg ccaagtcttg gctcaccagt gcctatttta ctggctttat tgtttgctta ctttatgctc ctgctgcctt tgttgcctgc ttcacctact tccacatttt caaaaattgc cgtcagcaca ccaaagagat aaatggaccga agagcccgat tccctagtca tgaggtagat tctccagag agactggaca cagccctgac cgctcgctacg ccatgggttt gtttaggata accagtgtat tttatatgct gtggctcccc tatataattt actttctct agaaagctcc cgggtcttgg acaatccaac tctgtctctc ttaacaacct ggcttgcatg aagtaatatg tttgttaact gtgtaataata cagcctctcc aacggcggtt tccggctagg cctccgaaga ctgtttgaga caatgtgcac atcctgtatg tgtgtgaagg atcaggaagc acaagaaccc aaacctagga aacgggctaa ttcttgcctc atttga	Homo sapiens
488	160212 G Protein-Coupled Receptor GPR52	NP_005675.1	MNESRWTEWR ILNMSGIVN ASERHSCPFG FGHYSVDVC IFETVIVLL TFLIAGWLT P VIEAFHCAPL LHHYTTSYFI QTMAYADLEV GVSCIVPTLS LLHYSTGVHE SLTCRVFGYI ISVLKSVSMA CIACISVDRY LAITKPLSYN QLVTPCRLRI CIILLWIYSC LIFLPSFFGW GKPGYHGDI F EWCATSWLTS AYFTGIVCL LYAPAAAFVC FTYHFIFKIC RQHTKEINDR RARFPSHEVD SSRETHSPD RRYAMVLEFI TSVFYMLWLP YIIYFLLESS RVLDNFTLSF LTTWLAVSNS FCNCVIYSL NGVFRIGLRR LFEFMCTSCM CVKDOEAQEP KPRKRANSCS I	Homo sapiens
489	160217 G Protein-Coupled	NM_005683	atgagtcagc aaaacaccag tggggactgc ctgtttgacg gtgtcaacga gctgatgaaa A accctacagt ttgcagtcac catccccacc ttcgtcctgg gcctgtcctc caacctgctg	Homo sapiens

Receptor GPR55	490	160217 G Protein- Coupled Receptor GPR55	NP_005674.1	gcatccatg gcttcagcac ctctcttaag aacaggtggc cagattatgc tgcacacctc atctacatga tcaacctggc agcttttgac ctgctgtggt tgctctccct cccattcaag atggtctgtt cccaggtaca gtccctcttc ccgtccctgt gacccctggt ggagtgcctt tacttgctca gcatgtacgg aagctcttc accatctgct tcaatcagcat gacccgggtt ttggccatcc gttaccctgt actggtgagc cactcggctc cccaggaag atctttggga tctgcatgca caatctgggt cctggtgtgg accggaagca tccctatcta cagtttccat gggaaagtgg aaaaatacat gtgttccac aacatgtctg atgatacttg gagcgcaag gtcttctccc cgtgtgaggt gtttggcttc ctcttccca tgggcatcat gggcttctgc tgttccagga gcatccacat cctgctgggc cgcgagacc acaccagga ctgggtgcag cagaaagcct gcatctacag cctgcagcc agctggctg tattcgtggt ctcttcttc ccagtcacc tgggttctt cctgcagttc ttggtgagaa acagctttat cgtagagtgc agagccaagc agagcatcag ctcttctctg caattgtcca tgtgtttctc caatgtcaac tgtgctggtg atgttttctg ctactacttt gtatcaaaag aattccgcat gaacatcagg gccacacgc cttccagggt ccagctgggt ctgcagaca ccagatctc cgggggctaa LFDGWEIMK TLOFAVHIPT FVLGLLNL AIHGFSFLK NRMEDYAATS P IYMINLAVFD LLVLSLPK MVLQVQSPF PSLCTIVECL YFVSMYGSVF TICFISMDRE LAIRYPLIVS HSGPGRSLG SACTIWLW TGSIPYSEH GKVEKYMCPH NMSDDTWSAK VFPLEVFG LLPNGIMFG CSRSIHLLG RRDHTQDMVQ QKACIYSIAA SLAVFVWSFL PVHLGFFLQF LVRNSFIVEC RAKQISFFL QLSMCFNNV CCLDFVCYF VIKFRMNIR AHRPSRVQIV LQDTISRG	Homo sapiens
Receptor GPR35	491	160219 G Protein- Coupled Receptor GPR35	NM_005301	atgaatggca cctacaacac ctgtgctcc agcacctca cctggccccc agcatcaag A ctgggcttct agcctactt gggctctctg ctggtgttag gctgctgtt caacagcctg ggctctggtg tgtctgtctg ccgcagtcag cagtggacgg agaccggcat ctacatgacc aacctggcgg tggcgcacct ctgctgtctg tgcacctgc cttcgtgct gcactccctg cagacacact cagacacgc gctgtgccag ctctccagg gcatctacct gaccaacagg tacctgagca tcaagctggt cagggccatc gccgtgacc gctatgtggc cgtcgggac cggctgctg cccgctgggt cgggtccccc aggcaggtg cggcctgtg cgcgtctctc tgggtgctgg tcatcggtc cctggtggt cgtggtctc tggggattca gagggcggc ttctgcttea ggagcacccg gcacaaattc aactccatgc ggtcccgct gctgggattc tacctgccc tggcctggtt ggtctctgc tccctgaagg tggtagctgc cctggccccag aggccaccca ccagcgtggg gcaggcagag gccaccgca agctgcccc catggtctgg gccaacctc tgggttctgt ggtctgttc ctgccccgc agtgggggt gacagtgcgc ctgcagtggt gctggaacgc ctgtgcccctc ctggagacga tccgtcggc cctgtacata accagcaagc tctcagatgc caactgtgc ctggacgcca tctgtacta ctacatggcc aaggagtcc agggggcgtc tgcactggcc gtggctccc gtgctaaagg ccacaaaagg caggactctc tgtcgtgac cctgcctaa	Homo sapiens
Receptor GPR35	492	160219 G Protein- Coupled Receptor GPR35	NP_005292.1	MNCTYNTCS SLDTWPPAIK LGFYALIGVL LVGLLENSL ALWVFCCRMQ QWTETRIYMT P NLAVADLCIL CTLFVLHSL RDTSDPLCQ LSQGIYTNR YMSISLVIAI AVDRVAVVRH PLRGLRSP RQAAVCAVL WVLVIGSLA RWLIGIQEGG FCFRSTRINF NSMRPPLLG YLFVAVVFC SLKVITALAQ RPPTDVQAE ATRKAARMW ANLLFVVCF LPLHVGLTVR LAVGNACAL LETIRRALYI TSKLSDANCC LDAICYMA KEFQEAASALA VAPRAKAHKS	Homo sapiens

493	160221	G Protein-Coupled Receptor GPR27	NM_018971	QDSLCTLA	atggcgaaacg cgagcgagcc ggggtggcagc ggcggcgccg aggcggccgc cctgggcctc A aagctggcca cgcctagcct gctgctgtgc gtgagcctag cgggaaacgt gctgttcgcg ctgtgatcg tgcggagcg cagcctgca cgcgcccgct actaatgct gctgacactg tgcttgccg acgggtcgcg cgcgctgccc ggcgctccg ccgtcatgct ggcggcgccg cgtggggcg cgcggcgccg ggcgcccgcg ggcgctccg gctgcaagct gctgcccctc ctggccgcg tctctgctt ccacgcgcg tctctgctc tggcggtgg cgtcacccgc tacctggcca tgcgcacca cgccttctat gcagagccc tggcggtcg gccgtgccc gccatgctg tgtgcccgc cgtggcgctg gcgctggccg cggccttccc gccagtgtg gacggcggtg gcgacgacga ggcgcgcg tgcgcccctg agcagggccc cgcggcgcc ccggcgccg tgggttctt gctgctgtg gcgctggcg tggcgcccgc gacactgctc tacctccgc tgccttctt catccacgac cgcgcaaga tggcgcccgc gcgctggcg ccgcgcgtca gccacgactg gaccttccc ggcggcgccg ccacggcca ggcggcgcc aactggacg cgggcttcg cgcggggccc acgcgcgcg cgttgtggg catccggccc gcaggcgccg cgcggcgcc cgcgcgcctc ctcgtgctg aagaattcaa gacggagaag aggctgtgca agatgttcta cgcgtcag cgtctcttc tgcctctctg ggggcctac gtcgtggcca gctacgtcg gctcctgtg cgcggcgccg ccgtccccc ggcctacgtg acggcctccg tgtggtgac cttcgccgag gccggcatca acccgtcgt gtgctctc ttcaacagg agctgaggga ctcgtcagg gccacttcc cctgtgcca gagccccg accacccagg cgacctcc ctcgacactg aagcattg gttatga CLADGLRALA CLPVMILAR RAAAAGAPP GALGCKLLAF LALLFCFHAA FILLGVGVR P YIAIAHRRFY AERLAGWPCA AMLVCAAWAL ALAAFPVVL DGGGDEDDAP CALEQRPDGA PGALGFLLLL AVVVGATHLV YLRLLFFIHD RRMKRPALV PAVSHDWTFH GPGATGQAAA NWTAGFGRGP TPPALVGIRP AGPGRGARLL LVLEEFKTEK RLCKMEYAVT LFLLLMGPY VVASYLRLV RRGAVPQAYL TASVWLTFQA AGINPVVCFE FNRELRDCFR AQFPCCQSPR TTQATHPCDL KGIGL	Homo sapiens
494	160221	G Protein-Coupled Receptor GPR27	NP_061844.1		atgggtccctc acctctgct gctctgtctc ctccccttg tgcgagccac cgagccccac A gagggccggg ccgacgagca ggcggcgag ggcggcctg cgtgcccac tgcctcgac tcttctctt ggaacaacta cacttctcc gactggcaga acttgtggg caggaggcgc tacggcgctg agtcccagaa cccacggtg aagccctgc tcatgtggc ttactcttc atcatgtct tctactctt tggcaacgtc cgtgtctgc atgtcatctt caagaaccag cgaatgcact cggccaccag cctcttcac gtcaacctg cagtggcca cataatgac acgtgtctca acacccctt cactttggt cgtttgtga acagacatg gatattggg aaggcattg gccatgtcag cgccttgcc cagtactgt cactgacgt ctcagactg acactgacag ccattgggt ggatgcacc caggtcatca tgcacctt gaaacccgg atctcaatca caaagggtg catctacac gctgtcatc ggaccatgg tacgttctt tcaactccac atgtatctg ccagaaatta ttactctta aatacagtga ggacattgtg cgctccctct gctgcccaga ctccctgag ccagctgacc tcttctggaa gtacctggac ttggccacct tcatctgct ctacatcctg cccctctca tcatctctg gccctacgct	Homo sapiens
495	160222	G Protein-Coupled Receptor GPR72	NM_016540			Homo sapiens

496	160222 G Protein- Coupled Receptor GPR72	NP_057624.1	<p> cgtgtggcca agaaactgtg gctgtgtaat atgattggcg atgtgaccac agagcagtag tttgccctgc gggcaaaaaa gaagagacc atcaagatgt tgatgctggt gtagtgcctc tttgccctct gctggttccc cctcaactgc taccctccc cctgtccag caaggtccatc cgaccaaca atgcccctca ctttgccctc cactggtttg ccatgagcag cactgctat aaccccttca tatactgtg gctgaacgag aacttcagga ttgagctaaa ggcattactg agcatgtgc aaagacctcc caagctcag gaggacgggc aaccctccc agtccctcc ttcagggtgg cctggacaga gaagaatgat gcccagaggg ctccccctgc caataacctc ctgcccacct cccaactcca gtctgggaag acagacctgt catctgtga accattgtg acgatagtt agaagaggtt gggaagaggg agtggagggg gctgtctcc acctgagga gggaagagg gectattctc acacatgac ttcagggtgc tggaaacaca cctctgcaga aggtgtagg actottgaat tcttaggaaa ctgtccagcc tctagccc atgtgatgtg aaaactaaa ggcaccacca actagacatg tttcataaa tccccatcta agaaacactg ggaggcacag cagctgtat ccttgaggaa gaggagcag gacaaacttg gccagatgg gggtgaatc attcaactgc ctccatctgt ggggcagctg ctgccttaca gcccttcta ctagactgag catcccgag gagacctaaa tcatacttg ggtgtgtga cccagatgca cagagctctg ctggaacag gtacacgggc cagggaatg ccagcaa cagagctctg ctggaacag gtacacgggc cagggaatg ccagcaa YGAESQNPV KALLIVAYSE IIVFSLFQNV LVCHVFQKQ RMHSATSLFI VNLAVADIMI TLINTPTFIV RFVNSTWIEG KGMCHVSREA QYCSLHVSAL TLTAIAVDRH QVIMHPLKPR ISITKGVYI AVIWTMAFF SLPHAIQKQL FTFKYSIEDIV RSLCLDPPE PADLFWKYLD LATEFILLYL PLIISVAYA RVAKIMWLN MIGDVTTEQY FALRRKKKT IKMLMLVVVL FALCWEPNLC YVLLLSKVI RTNNALYFAF HWFAMSTCY NPFICYWLN NFRIELKALL SMCQRPPKQ EDGQSPVPS FRVAWTEKND GQRAPLANL IPTSLOQSGK TDLSSVEPIV TMS </p>	Homo sapiens
497	160223 G Protein- Coupled Receptor G2A	NM_013345	<p> gggaggggtg cagggctagc cagcagggcg gggccctggg tcaattttaa cctcagagt A gaactgttg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc cacactgaga ttggaacccg caaataatgc cagggaggaa gdtgagcaag ggacacgaca ctcaccoga taaacccaac aagcgcagcg aggtgtggg gaaacoggan cctgacac cgccggggga aggtgggcn ccgccaccac cgtggaaga cagcgggan gcacccacg agatgagacg gaactgcgt gagatccagc aatncnact gtgggtctga cccaggatan cggaaagcag ggaactgaac agccctctc atgttcttga caccgtcatt ctgagcagct cagctaaggc acagaggcag ccgagcgtct gtcagagag tggtggctga gcagaacag ccacacgcca cagccacac ccacacgtg caggattgct caagatgga gggcacagt gaatataat atatatatt attttggcg agacctgga gacacactg aatacaatgg aataccatcc cgcctttgaa aggaaggga atctgtgac acgtgcaac aggagggagc ttgaggacac tgtgtgtagt ggagcacgtg agacagga ggacacacg tgaagacag cagagatgcc caccacgtg gggaggtgac agggagccc agcgacaga gacaagtgg aatggaggcc tgggggctgg gagcaatgc ggagcagtg cttcctgggg cagagtctcc gtttgggaag atgaagaagt tctgcgcag gatgcggcg atggttgag aagaatgga atgtgcccc atgtactgaa aaacggttac atggaacg ccacccagc gaccacct gccccgtgg cctccctgg cctctccgc aagacctga acaactgtc cttcgaagag </p>	Homo sapiens

498	160223	G Protein- Coupled Receptor G2A	NP_037477.1	<p>agcaggatag tcctggtcgt ggtgtacagc gcggtgtgca cgtcgggggt gccggccaac tgcctgactg cgtgctggc gctgtgcag gtaactgcag gcaactgtgt gccgtctac ctgctctgcc tggactctg cgtgtgtgtg tacacaggca ccttgccact ctggtctatc tatatccga accagcagg ctggacccta ggcctgctgg cctgcaagg gacegcctac atcttcttct gaaacatcta cgtcagcatc ctcttctgt gctgcatctc ctgcgaccgc ttcgtggccg tgggtacgc gctggagagt cggggccgc gcegcggag gacegccatc ctcatctccg cctgcatctt catctctgc tgcattgttc actaccgggt gtccagagc gaagacaagg agacctgctt tgacatgtg cagatggaca gcaggattgc cgggtactac tacgccagg tcaccgttgg ctttgcata cctctctca tcatcgctt caccaccac cggattttca ggagcatcaa gcagagcatg ggtttaagg ctgccagaa ggccaagggtg aagcactcgg ccactgcggt ggtgtcatc ttctagtct gctccgccc gtaccactg gttctcctcg tcaagccgc tgccttttcc tactacagag gagacaggaa cgcctgtgc ggcttgagg aaagctgta cacagctct ctacgtgctg gccacggac attccgcaa agaagtctc ggcgtggctg acccattat ctacgtgctg gccacggac attccgcaa agaagtctc agaatccata aggggtggaa agagtgtcc atgaagacag agtcaccag gtcacccac agcagggaca ccgaggagct gcagtgcgc gtggccctg cagaccacta cacctctcc agccctgc accaccagg gtcaccatgc cctgcaaga ggtgattga ggagtctgc tgagccact gttggtcagg ggtatggcag gttgggggtc ctggggccag caatgtgtt cctgtgact gagccacca gccacagtg ccatgtccc tctggaagac aaactacca ttctcgttc ctgaagccac tccctcgtg accatggcc ccangcttc ccacatggaa ggtggtgca tgccaaggg agagcgaca cctccaggct tccggagacc canagagcat gtggcangca gtggggctc ttcatcata nctgctcgt ctggctccct tggctgtggg cangtacacc cctgctggca gaagtacctg gtggctgccc tgttcgcac agtggcgatg actttattg cggagcattt ctgcaagcgt tgcctggatg cgggtgtgca ttgtggccc tctgggctcc tgcctcaaaa tgtcagtgag caccatgctg gaagtcacca tcactgtggc agcggccagg aaggeatagg gcancctacc acctccaang gggeangcgc cctcatctgg ggttgggt</p>	Homo sapiens
499	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NM_004767	<p>cggtgtacagg gggcccaaga gctgggctgg ctgtctcctg ctcatccagc catgagggtg A ctgtggcccc tggctgtctc tctgtgtgtg atttggctg tggggctaag cagggtctct gggggtgccc ccttgacct gggcaggcac agagccgaga cccaggagca gcagagccga tccaagagg gcaccgagga tgaggaggcc agggcgctgc agcagtatgt gcctgaggag tggggcgagt accccggcc cattcacct gctggcctgc agccaaccaa gccctgtgtg gccaccagc ctaaccgca caaggatgg ggacccccag acagtgggca ggaactgagg ggcaatctga cagggggcacc agggcagagg ctacagatcc agaaccctt gataccggtg</p>	Homo sapiens

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>accgagagct cctacagtgc ctatgccatc atgtttctgg cgtggtggt gtttgcggtg ggcattgtgg gcaacbtgtc ggtcatgtgc atcgttggc acagctacta cctgagagc gcctggaact ccactcttgc cagcttggc ctctgggatt ttctgttcc tttttctgc ctccctattg tcatcttcaa cgagatcacc aagcagaggg tactgggtga cgtttcttgc cgtgcgtgc ccttcattga ggtctctct ctgggagtca cgaatttcag cctctgtgcc ctgggcatgg accgcttcca cgtggccacc agcaccctgc ccaaggtgag gcccatcgag cgggtgccaat ccactctggc caagtggct gtcattctgg tgggtcccat gacgtggct gtgcctgagc tctgtctgtg gcagctggca caggagcctg cccceaccat gggcacctg gactcatga tcatgaaacc ctacgcccgc ctgcccagat cctgtatttc actgtgtatg acctaccaga acgcccgcct gtgtgtgtac ttgtgctgct acttctgctt gccatctctc ttcacagtca cctgcccagct ggtgacatgg cgggtgcgag gccctccagg gaggaagtca gagtgcaggg ccagcaagca cgaagcagtg gagagccagc tcaacagcac cgtggtgggc ctgaccgtgg tctacgctt ctgcacctc ccagagaacg tctgaacat cgtggtggcc tacctctcca ccgagctgac ccgccagacc ctggacctcc tgggacctcat caaccaatcc tccaccttct tcaaggcgc catcaccca gtctgtctcc ttgcatctg caggccgctg ggccaggcct tctggactg ctgctgtgc tgtgtctgt aggagtgcgg cggggtctcg gaggectctg ctgccaatgg gtccgacaac agctcaaga ccgaggtgtc ctctccatc tacttcaca agcccaggga gtacacccca ctctgcccc tgggcaacac ttgctgaggg cccagtagg gtggggagg agggagaggg cggcacccc gccggtgtct gctgttcttt cccctagggt ctgtcttctg tgcctgtctt gctgtctagg gatggacttg gttcctcttg tcaaggttg ggaatccg</p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccgggggagg ccatgaacgc caggggacc ccggtggccc ccgagtcctg A ccaacagctg gcggccggcg ggcacagccg gctcattgtt ctgcactaca accactgggg ccggctggcc ggccgcgggg ggccggagga tggcgccctg gggccctgc ggggctgtc ggtggccgc agctgcctgg tggctgtgga gaactgtctg ggtctggcg ccatcaccag ccacatgcgg tgcgaagct ggtctacta ttgctgtgtg aacatcacgc tgagtgaact gctcaagggc gcggcctacc tggccaacgt gctgtgtctg gggcccgca ccttcctct ggcgccgc ccagtggttcc tacgggaggg cctgctcttc accgcccctg ccgcctccac cttcagcctg ctcttactg caggggagcg cttgcccacc atggtggcg cgggtggcga gagcggggcc accaagacca gccgcgtcta cggcttcttc ggcctctgct ggtgctggc cgcctgctg gggatgtgc ctctgtctgg ctggaactgc ctgtgcgctt ttgaccgctg ctccagcctt ctgcccctct actccaagcg ctacatcttc ttctgcttg tgatcttgcg</p>	Homo sapiens

502	160225	Spingolipid NP_003766.1	Receptor Edg6	<p> cggcgctctg gccaccatca tgggcctcta tggggccatc ttccgcttgc tgcaggccag cgggcagaag gcccacgccc cagcgccccc cgcgaaggcc cgcgcctgc tgaagacggt gctgatgac ctgctggcct tcttggtgtg ctggggccca ctctcgggc tgcgtctggc cgacgtctt ggctcaacc tctgggcccga ggagtacctg cggggcatgg actggatcct ggccctggcc gctccaact cggcggtcaa ccccatcatc tactcctcc gcagcaggga ggtgtgcaga gccgtgctca gcttctctg ctgcgggtgt ctccgctgg gcagcgagg gcccggggac tgcctggccc gggccgtoga ggtccactcc ggagcttcca ccaccgacag ctcttgagg ccaagggaca gcttctgggg ctcccgctcg ctacgctttc ggatggggga gcccctgtcc agcatctcca ggtgcgagg catctgaagt tgcagtcttg cgtgtggatg gtgcagccac cgggtgcgtg ccaggcaggc cctcctgggg tacaggaagc tgtgtgcacg cagcctgcc tgtatggga gaggggaaag ggacaggccc ccatggtctt cccggtggcc tctgggggct tctgacgcca atgggcttc ccatgggtcac cctggacaag gaggtaacca ccccacctcc ccgtaggagc agagagcacc ctggtgtggg ggcgagtgtt tcccccaaac cccgcttctg tgtgattctg gggaagtccc ggcctctctc tgggcttcag tagggctccc aggtgtcaag ggtggactg tgggatgcac gccctggcaa cattgaagt cgatcatggt aaaaaa </p>	Homo sapiens
503	160228	T-Cell Death-Associated Gene 8 (GPR65)		<p> VLENLLVLA ITSHMSRRW VYCLVNITL SDILTGAAYL ANVLISGART FRLAPQWFL REGLLTALA ASTFSLIFTA GERFATMVRP VAESGATKTS RVYGFGLCW LLAALLGMIP LLGNCLCAF DRCSLLPLY SKRYILFCLV IFAGVLATLV QASGQKAPRP AARRKARLL KTVLMILLAF LVCWGPFLGL LLADVFGSL WAOEYLRGMD WILALAVINS AVNPIIYSER SREVCRAVLS FLCGGLRLG MRGPGDCLAR AVEAHSGAST TDSSLRPRDS FRGSRSLSR MREPLSSISS VRSI </p>	Homo sapiens

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	<p> MNSTCIBEQH DLDHYLFPPIV YIFVIIVSIP ANIGSLCVSF LQPKKESELG IYLFSLSLSD P LLYALTPLPW IDYTNKNDNW TESPALCKGS AFLMYNKFSY STAFLTICAV DRYLAVVYPL KFFFLRPRRI ALMVSLSIWI LETIFNAVML WEDETVEYC DAESNFTLC YDKVPLEKWQ INLNLFCTCT GYAIPLVITL ICNRKYQAV RHNKATENKE KKRIIKLLVS IYVTFVLCFT PFHVMLLRIC ILEHAVNFED HNSGKRTYT RMYRTVALTS LNCVADPILY CFVTETGRYD MNWILKFCGT RNTSQORQRK RILSVSTKDT MELEVLK </p>	Homo sapiens
505	160300	Encephalopsi n	NM_014322	<p> CGAGCCCGC CGCAAGCTGA GCGCTCCGC CGCCAGGCG CGCCGGGCG GGGCCATGTA A CTCGGGGAAC CGCAGCGGG GGCAGGCTA CTGGGACGG CGCGGGGCG CGGGCGCTGA GGGGCGGGCG CGGGCGGGGA CACTGAGCCC CGCGCCCTC TTCAGCCCC GCACTACAGA GCGCCTGGCG CTGCTGCTGG GCTCCATTGG GCTGCTGGG GTCGGCAACA ACCTGCTGGT GCTGCTCTC TACTACAAGT TCCAGCGGT CCGCACTCC ACTCACTCC TCTGGTCAA CATCAGCTC AGCGACCTGC TGGTGTCTT CTTCGGGTC ACCTTACCT TCGTGTCTG CCTGAGGAAC GGCTGGGTG GGGACACCT GGGCTCGTG TGGGACGGT TTAGCGGCAAG CCTCTCGGG ATGTGTTCCA TGGCACCTT AACGTTGCT GCTATGAAC GTTACATTCG CGTGGTCCAT GCCAGAGTGA TCAATTTTC CTGGGCTGG AGGGCCATTA CCTACATCTG GCTCTACTCA CTGGCGTGGG CAGGAGCAC TCTCTGGGA TGGAAACAGT ACATCCTGGA CGTACACGGA CTAGGCTGCA CTGTGGACT GAAATCCAAG GATGCCAAG ATTCTCTCTT TGTGCTTTC TTATTCTTG GCTGCTGGT TCGTGTCTG GAAGATCTTC AGACAATTA TGGCCATATT CTATTCTCA TCGAATGCT TCGTGTCTG GAAGATCTTC AGACAATTA AGTGATCAAG ATTTTAAAT ATGAAAGAA ACTGGCCAA ATGTGCTTTT TAATGATATT CACCTTCTG GTCTGTGGA TGCCTTATAT CGTGATCTG TCTTGGTGG TTAATGGTCA TGGTCACTG GTCACCTCA CAATATCTAT TGTTCGTAC CTCTTGTGA AATCGAAGAC TGTATAAAT CCAATGATTT ATGTCTTCA TATCAAGAA TTTCAAGAT CCGTTTGTGA GCTTCTGTC CTCGACTGC TGAGGTGCA GAGGCTGCT AAAGACCTAC CAGCAGCTGG AAGTGAATG CAGATCAGC CCATTGTGAT GTACAGAAA GATGGGGACA GGCCAAAGAA AAAAGTGACT TTCACTCTT CTTCATCAT TTTTATCAT ACCAGTGATG AATCACTGTC AGTTGACGAC AGCGACAAA CCATTGGGT CCAAAGTTTG ATGTTAATCC AAGTCTGTC TTTGTAGGAA TGAAGGATGG CAACGAAAGG TGGGGCTTA AATTGGATGC CACTTTTGA CTTTCATCAT CTTCTGTAAG AAGAGTGTC TGGAAATACC GTTCTATGTA ATATCAACAG AACCTTGTG TCCAGCAGGA AATCCGAAT GCCCATATG TCTTGGCT CAGGAAGAGG TTGAACAAA ACAAACTCT TTAATTCAAC GGTGCTTTA CATAATGAAA AAACCACTG TGCACAGAT GGGCATCTAA CATCATCAT TCTAATGTG TTGGAGATTT TCAATTCAAA TATATTTT AAATTACTCT ATTTCCAAA ACAGCAATG CATTCTCTC GAAAATACCT TACTGTAAA ATAACCTGTC GTACACATG TGTGAAGTAG CTAGAATA CTGAATTTT TTGTACTGT TGGACTCTAT TCACTGTCTAT GTCTATATC TGATCAAGT ATCAAGGAGA TAATCTAGA ATGAAAAAGA AAATCTCTT GTTGAACA AAGACGTTT TATATGTGA GTATGACAAA GAGGAGTTT AGAGACAACT TTGAATCTT GTCAAGCTGG AGACGAGAC CAGAGGAATC TACAAGGAAA ACTCCATAT ATTTGTTCC CCAAATGTC TGCCCTACA GACTCAAGC TCTTTCTT TGTTTTGTG TTCTCTAAA AATTACTGT TCTTTGTGA TGCTATAAA GCCAGGGAGT TCTAAGACGC CAGCTCTTG AGATTGCTC ATCCCTGT ATTTCCACA TATATATTAC ATATACCGC TAATAAATT ATGTTTGTG TAAAAAAA </p>	Homo sapiens

506	160300 Encephalopsi n	NP_055137.1	MYSGNRSGGH LVLVLYYKFQ RLRTPHLLIL GSLFGIVSIA LDVHGLGCTV IQVKILKYE NTVYNPVIYV KKKVTFNSSS IIIFIITSDS	GYWDGGGAAG LVNLSLDLIV IRVHARVIN DWKSKDANDS KKLAKMCFLM FMIRKFRSL LQLLCLRLR LSVDDSDKTI	AECPAPAGTL VNISLSDLIV IRVHARVIN SEVLFELGCG IFTEFLVCWMP LQLLCLRLR LSVDDSDKTI	SPALFSPGT SLFGVTFTEV FSWARRAITV LVVPLGVLG YIVICFLVNV CQRPADLPA GVQSLMLIQV	YERLALLGSG SCLRNGWVWD IWLXSLAWAG CYGHILYSIR GHGHLVPTPI AGSEMQRPI RPL	IGLLGVGNL P TVGCVWDGFS APLLGNRYI MLRCVEDLQT SIVSYLFAKS VMSQKGDGRP	Homo sapiens
507	160312 Sphingolipid Receptor Edg5	NM_004230	atgggcagct accaggaga gtcatcctct aacagcaagt ctggcaggcg acgcctgtgc ttcagcctcc ggcagcgaca gtccctcggg actgtcctgc atccctgttg gtcgacatgg gtctttatcg gtccactcct tccctgtcta cggcgcctgc ccggggccacc cccaagtcac	gtactcggg cgctggaaac gttgggccat tccactcggc tggccttcgt agtgttttgc tggccatcgc agagctgccc gcctgcccac ctctctacgc ccactgtggc cctgtgctgg ccttggtcgg caagcattat cctgtacgtg gacgttagcc gcgcgccttc ctacaaagcc ctacacgttg gcgggggggtg actccgcagc ggaggggcaac	AECPAPAGTL VNISLSDLIV IRVHARVIN SEVLFELGCG IFTEFLVCWMP LQLLCLRLR LSVDDSDKTI	SPALFSPGT SLFGVTFTEV FSWARRAITV LVVPLGVLG YIVICFLVNV CQRPADLPA GVQSLMLIQV	YERLALLGSG SCLRNGWVWD IWLXSLAWAG CYGHILYSIR GHGHLVPTPI AGSEMQRPI RPL	ctataattat A ggccttcac ggtggcccg ctccgatcta gctgaggctg ggcctctgtc caagctgtat catctegctg ggcctgtccc cttctccatc cgtgtcaggc tgcctgtccc caccctgaat ggaggtgctt gggtcggaacc catgcacatg	Homo sapiens
508	160312 Sphingolipid Receptor Edg5	NP_004221.1	MSGLYSEYLN NSKFSAMYL FSLLAIAIER TVLPLYAKHY VFIVCWLPAP RPLQCWRPGV	PNKVQEHVNY FLGNLAASDL HVAIAKVILY VLCWVTIFSI SILLLDYACP GVQRRRRVGT	TSRQVASAFI ILSGSVTIRL LIGASWLISL RIYCVVRSSH HYFFAVSTLN SSSLERGMHM PGHLLPIRS	TPVQWFAREG VLGGLPILGW ADMAAPQTLA SLLNPVIYTW PTSPTELEGN RSRDLRREVL TVV	cttttcaccg acgacacgta gcccgcgctc gcccgcgctc gagcgtctgt taccggctgc gtgtgctcac gtgtgtaccc	SASITLSASV NCLGHLEACS LLKTVTVILG SLLNPVIYTW PTSPTELEGN RSRDLRREVL TVV	Homo sapiens
509	160314 G Protein-Coupled Receptor GPR103	AF411117	atgatctgct ggcatctgat gcccactgcg acagcaatgc aacctgacgc gagctgcccg gcactctttg gtcaccaca	gcagtgctct tagcaaaactc ggggaatgt agggcgctaa gggagcagtt gacgcgcaa gcaatgctct tctttatctg	cttttcaccg acgacacgta gcccgcgctc gcccgcgctc gagcgtctgt taccggctgc gtgtgctcac gtgtgtaccc	tagcctgact A ctacgttgta ccgggagcgc ccgggagcgc gagcgtctgt gagcgtctgt gagcgtctgt gagcgtctgt	Homo sapiens		

510	160314 G Protein- Coupled Receptor GPR103	ENSMPT2217 53	attcccgctca ccatgtctcca gaacatttcc gacaacttgc tggggggtgc tttcatttgc aagatgggtgc catttgcctc gcttaccgct gtgtgtgacag aaatcctcac tatgacctgc attgtgtgg aaaggaccca gggacttgtg cctccttcta aaatgaagt gcaatacaccc aacggaaggg ctttccaat gctaggtgtg gtctgggtgg tggagtgcat cgttagatcca cccatgtggc acgtgcaaca acttgagatc aaatatgact tctatatga aaaggaacac atctgtgct tagaagagt gaccagcct gtgcaccaga agatctacac cacttctatc ctgtcatcct ctctctctg cctcttatgg aagaagaac gagctgtcat tatgatgtg acagtgggtg ctctcttgc tgtgtgtgg gcaccattcc atgtgtcca tatgatgatt gaatacagta atttgaaaa ggaatatgat gatgtcacaa tcaagatgat ttttgcctac gtgcaaatga ttggatttcc caactccatc tgtaatacca ttgtctatgc atttatgaat gaaaacttca aaaaaatgt tttgtctgca gttgttatt gcatagtaaa taaaaccttc tctccagcac aaaggcatgg aaattcagga attacaatga tgcggaagaa agcaaatgtt tccctcagag agaattccagt ggaggaaacc aaaggagaag cattcagtga tggcaacatt gaagtcfaat tgtgtgaaca gacagaggag agaaaaagc tcaaacgaca tctgtctc tttaggtctg aactggctga gaattctcct tttagacagt ggcattaa RVGDSVLRT IHGKEMSKIA RKKRAVIMM VTWVLFVAVC WAPFHVHMM IEYSNFEKEY DDVTIKMIFA IVQIIIGFSNS ICNPIVYAFM NENFKKNVLS AVCYIVNKT FSPAQRHNS GITWMRKAK FSLRENPVEE TKGEAFSDGN IEVKICEQTE EKKLKRHLA LFRSELAENS PLDSG	Homo sapiens
511	160317 Neuropeptide FF 2 Receptor	NM_004885	tctggagcca agtaatgggt atactgatgc ttccttttct ttgcgcgct cggattctga A gtttcacaag aatgtacctg ggtgccctt agcgggatat gaatagcttc ttcggaaccc cagcgccag ctggtgctc ctggaaagt acgtctcatc tgcacggac aaggagcgcg ggagggagcg cagagactc agcgtccagc agcgcgctgg gccagcctgg agcggaaagc tggagtggag caggcagtc cggggggaca gacgtcggct gggattgagc cggcagactg cgaaaagtat ctggagcgg agcagggaca gaactgttg ctgcagacgg gcttgggtgga ttctggttc tccgcgcgac agggctcgcc ggagaggtt catcatgaat gaaaaatggg acacaaactc ttcagaaaac tggcatccca tctggaatgt caatgacaca aagcatcatc tgtactcaga tattaatatt acctatgtga actactatct tcaccagcct caagtggcag caattctcat tatttctac tttctgatct tctttttgt catgatggga aatactgtg tttgctttat tgtaatgagg acaaacata tgcacacagt cactaatctc ttcattctaa acctggccat aagtattta ctagtggga tttctgcat gcctataaca ctgctggaca atattatagc aggatggcca ttggaaaaca cgatgtgcaa gacagtgga ttggtccagg gaatatctgt cgcagcttca gtctttacgt tagttgcatc tctgttagat aggttccagt gtgtggtcta cctttttaa ccaaagctca ctatcaagac agcgtttgtc attattatga tcattctgggt cctagccatc acctatgt ctccatctgc agtaattgta catgtgcaag aagaaaaata ttaccagtg agactcaact ccagaataa aaccagtcca gtctactggt gccgggaaga ctggccaaat caggaaatga ggaagatcta caccactgtg ctgtttgcca acattctacct ggtccctc tccctcattg tcatcatgta tggaggatt ggaatttcc tcttcagggc tgcagttcct cacacaggca ggaagaacca ggagcagtg cactgtgtgt ccaggaaaaa gcagaagatc attaatgagc tctgtattgt ggccctgctt tttattctct	Homo sapiens

Homo sapiens

514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p>tttattgatg agacttcogt agataaatgtg gaaatcaaat ttaaccaaga aaaaagattt ggaacaaatg ctctcttaca ttttattatc tgggtgtaca gaaaagatta tataaaattt aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaat gcaacaggat acaaatggcc actagaggtc attatttctt tctttctttt tttttttttt aatttcaaga gcaatttcaat ttaacatttt gaaaagact aaggagaac gtatatccct acaaacctcc cctccaaaaca ccttctcaca tctttttcca caattcacat aacactactg ctttttgccc ccttaaatgt agatatgtgc tgaagaataa aaaaacgcc caactctga agtccattgc tgaactgc agccagggtt tgaagggtat gcagacttga agagtctgag gaactgaagt gggtcagcaa gacctctgaa atcctgggta aggtatttc tcttacaat tacaacagc ctctttcaca ttacaataat ataccatagg aggcacagc accattatta agccactttg cttacacctt aagtgtgtac aattcaagtg tgagaatgct gtgttaacta ttttttgaa ttctcttctt gtccagcaaa tactctaag atggttaaac atggaccta ctacagcaatg ccttctgga ccacaacccc tatccccctg cccaccctc ctcatbaaa acaaatactt ctactgtttg ggtgtgtgat aggtttctca atgcagatct ccttttcta gttagtata ttcttgactg catccgctaa aaatgttaaa gcttcttgag agacagacat gccagatttt cttggtatct ccataatac gacctacagt ccatggtcta cagatgtttt aaatagaatt gctattctcg atactacaa agactgaatt gctgacccac aatcagtaac atccatattg ggagattttt caaaggatgg tgacctgct tgtatttatt taccttggtt tttttttttg catccttctg tgattcmeta aagtaaaatg tggctttctg aaatgattga taagagtcta catcttctag aaaaataca taaaggagta gttagctct gtaaatgtgc cagcagctcc aacacgacca tctgagggtg agcccacgt ttttctcat ggctcaaaag gccctagaac ttgctctacct tcttgacctt acctcctag tacttatcca tctcttgaac tttatactct tgtataaatt tctaactttc agaaaatgcc atactctgt ttggcaccac acatgtatat ttccccctgg tacacttgga agactcttat ccactctgta aacctatgt tgtcatcact tgggtccatga aatattacct ggccaatata ccaccatcac ctcaaaccca atcaacccct cctctgtatg ctgtcacacc tatattatta aacttatcac attgcattgt aattacttcc tgacctttgt atctactctt ttagtaactg atgtatatat ctgaaaggag agattgttcc attgtgcaat caataaatgt ttgataaaat aaagccc</p>	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p>ctccacagg; ctggctggca agggccctg gtggctctgc gggggcagg gacgcttcc A tggtttatct ccacggcgc gatctgctg tccgctcgg ctccagaagc tggggtcag ggtccggcga ggcaggaagc ctgagggcac agccagagc agcctagtg cagtcagtg ggggcgactg ctctgtggc cctgtgtgct ggggttcagc ctgtctggcg gcacccagc ccccagctc tacgacgaga ggggagcac cggaggtggt gatgacagca gcccctcaat cctgcttgc ccccggtct accagggca agtctgtgcc atgacagtg acaccctgga gctccgggac agctcacggg cactgcttct gggctgggtg cccaccaggc tgggtgccgc</p>	Homo sapiens

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 516 160329 Proteinase- NP_003941.1 MWGRLLWPL VLGFSLSGQT QTPSVYDESG STGGDDSTP SILPARGYP GOVCANDSDT P Homo
 Activated IELPDSRAL LLGWFTPLV PALYGLVLV GLPANGLALW VLATAPRLP STMLMNIAT sapiens
 Receptor 4 ADLLALALP PRIAYHLRGQ RWPFEACR LATALLYGHM YGSVLLAAV SLDRYLALVH
 PLRRLRGR RLALGLCMVA WLMMAALALP LTLOQTFL ARSDRVLCHD ALPLDAQASH
 WQPAFTCLAL LGCFLPLIAM LLCYATLHT LAASGRYGH ALRLTAVLIA SAVAFFVPSN
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 GDTVASKASA EGGSRGMGTH SLLIQ

517	160330 G Protein- Coupled- Receptor TM7XN1/GPR56	NM_005682	cggcagcagg gtctgctct gtccacacagg ctggagtgca gtggtgtgat cttggctcat A cgtaacctcc acctcccggt ttcaagtgat tctcatgctt cagctccc agtagctggg attacagggt gtgatttcca agagtactc cgtcggagga aatgacttcc ccagtcgctg ctgcagacga cactgttctt ctttgacttg ctcttctcgg tccaaggtgc ccacggcagg ggccacaggg aagactttct gttctgcagc cagcggaaac agacacacag ggcactcaca cactacaac ccacaccaga cctgggcatac tctctcagat ccttccctga cccaggggc gtccatgccc ctttccctgc agcccacct gcttccctga ccttccctga cccaggggc ctctaccact tctgctctta ctggaacga catgctggga gattacatct tctctatggc aagcgtgact tcttctgtag tgacaaagcc tctagcctcc tctgcttcca gaccaggag gagagcctgg ctacggggccc ccgctgttta gcaacttctg tcaactctctg gtggagccct cagaacatca gcttggcccag tgcggccagc tcaacttctt ccttccacag tcttccccc acggccgctc caaatgctc ggtggacatg tgcgagctca aaggggacct cagctgctc agccagtctc tgaagcatcc ccagaaggcc tcaaggaggc cctcggctgc cccggccagc cagcagttgc agagcctgga gtcgaaactg acctctgtga gattcatggg ggacatgggtg tcttctgagg aggaacgggt caacgccag gttatggaagc tccagcccac agcggcctc caggacctgc acatccactc cggcaggag gaggagcaga gcgagatcat ggaactactg gtgctgtctc ctccgaacact cttccagagg agaaaggcc ggagcgggga gctgagaag agactcctcc tgggtgactt cagcagcaca gccctgttcc aggaacagaa ttccagccaa gtcttgggtg agaaagttctt ggggattgtg gtacagaaca ccaagttagc caactcaccg gagccctggg tgcctacttt ccagaccag ctacagccga agaattgtgac tctgaattgt gtgttctggg ttgaagacc cacttgagc agccggggg attggagcag tctggtgtgt gagaccgtca ggagagaac ccaaacatcc tgttctgga accacttgac ctactttgca gtctgtatgg tctctctggt ggaagtggac gccgtgaca ageactacct gacctcctc tcttactgtg gctgtgtcgt ccttgccttg gctgctcttg tcaacttgc cgcctacctc tcttccaggg tgcctctgct gtgcaggagg aaactctggg actacacat caagtgcac atgaacctgc tgcctgctgt cttctgtgtg gacacgagct tcttctcag cgaagcgggtg gccctgacag gctctgaggc tggctgcca gccagtcca tcttctgca ctttctcctg ctcaactgcc ttctctggat gggcctcag ggtacaacc tctaccgact cgtggtggag gtctttggca cctatgtccc tggctaccta ctcaagctga ggcacatggg ctggggcttc cccatcttc tggtagcgt ggtggccttg gtggatgtgg acaactatgg ccccatcatc ttggctgtgc atagactcc agaggcgtc atctacctt ccatgtgtgt gatccgggac tccctggta gctacatcac caactgggc cttctcagcc tgggtgttct gttcaacatg gccatgctag ccacctggt ggtgcagatc ctggcggctgc gcccccac ccaaaaggg tcacatgtgc tgacactgct gggcctcagc ctggtccttg gccctgcttg ggccttgatc ttcttctct ttgcttcttg cacttccag cttgtcgtcc tctaccttt cagcatcatc acctcctcc aaggcttct catcttctc tggtagctgt cagtcggct gaggccccg ggtggccct cccctctgaa gagcaactca gactgcgcca ggtccccat cagctcggg agcaactcgt ccagccgcat ctaggcctcc agcccactg ccatgtgtat gaagcagaga tgcggcctcg tcgacactg cctgtggccc ccgagccag ggcagccca ggcagtcag ccgcagactt tggaaagccc aacgacctg gagagatggg ccgttgccat ggtgacgga ctcccggggc tggggctttt gaattggcct tggggactac tgggtctca ctaagctccc	Homo sapiens
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357/448

518	160330	G Protein- Coupled- Receptor TM7XN1/GPR56	NP_005673.1	MTPOSLLQTT LFILSLFLV QGAHGRGHR DFRCSQRNQ THRSLSHYKP TPDLRISIEN P SEALTVHAP FPAAHPASRS FDPDRGLYHE CLYVNRHAGR LHLLYKGRDF LLSDKASSLL CFQHEESLA QGPPLIATSV TSWSPQNIS LPSAASFTS FHPSPHTAAH NASVDMCELK RDLQLSQFL KHPQASRRP SAAPASQQLQ SLESKLTSVR FMGDMVSFEE DRINATVWKL OPTAGLQDLH IHSRQEEES EIMEYSVLLP RTLFRQTKGR SGEAEKRLLL VDESSQALFQ DKNSQVLGE KVLGIWQNT KVANLTFPV LTFQHQLOPK NVTLQCVFW EDPTLSPGH WSSAGCETVR RETQTSFCN HLTFFAVLMV SSVEDAVHK HYLSSLSYVG CWSALACLV TIAAYICSRV PLPCRPRD YTIKVHMLL LAVFLDTSF LLSPEVALTG SEAGCRASAI FLHFSLLTCL SWMGLEGYNL YRLWVEVGT YVPGVLLKLS AMGWGPFIFL VTLVALVDVD NYGPIILAVH RTPEGVLYPS MCWIRDSLVS YITNIGLFLS VLEFNAMLA TMVWQILRLR PHTQKWSHVL TLLGLSLVLG LPWALIFFSF ASGTFQLVVL YLFSIITSFQ GLFIFIWYWS MRIQARGGPS PLKNSNDCAR LPISSGSTSS SRI	Homo sapiens
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520	160387 Glucagon- Like Peptide 2 Receptor	NP_004237.1	<p> ggaagaagta aggtgagct gcggaatac tgggtccgct tcttgtagc cggccactca ggctgcagag cctgtgtcct ggggaaggac ttccgggtcc taggaataag tcccaagaag ctctcggaag gagatggcg cggaagcctt cggaagctgc agccctcact taacagtggg cggctccac attagccat cgaggtctt ggggagcttg gggccacgc ccaacaggac catgcagct gggcccggg cagcagcctg tccgagtgca gtgaggggga tgtcaccatg gccaacacca tggagagat tctggaagag agtgagatct ag IKQVTSILE ETTRWAQYK QACLRDLKE PSQIFCNQTF DQVVCWPHSS PGNVSPVCPs YLPWSESS GRAYRHCLAQ GTWQTIENAT DIWQDDSECS ENHSFKQNV DRYALLSTLQL MYTVGYSFSL ISLFLALTLL LFLRKLHCTR NYTHMNLFAS FILTLAVLV KDVVFNYSYS KRPDNGWM SYLSEMSSTSC RSQVLLHYF VGANYLWLV EGIYHLTLE PTVLPERRLW PRVLLGWAF PVLFPVWGF ARAHLENTGC WTNGNKKIW WIIRGPMMLC VTVNFFIFLK ILKLLISKLK AHQMCFRDYK YRLAKSTLVL IPLLGVHEIL FSFITDDQVE GEAKLIRLFI QLTLSFHGF LVALQYGFAN GEVKAELRKY WYRFLARHS GCRACVLGKD FRFLGKCPKK LSEGDAEKL RKLQPSLNSG RLLHLAMRGL GELGAQPOOD HARWPRGSSL SECSEGDVTM ANTMEEILEE SEI </p>	Homo sapiens
521	160388 Latrophilin- 1	NM_014921	<p> ttttttttt tttttttct aatttttggt cggcgccggt gctggggccag ggaaggaag A ggaacaggag cgcgcctcg tcccgcacc tctaccgcg ttcccccag ccccgctcc ggagatgtg cggcgccggg cggcgccggtt cggcgagccg caggagagac acgtggggc gaccacagag aggcgctga caggctgtg gtccaggccg tgggtccctg caggtgatgt ggggcaaac ccccgccaca ggcactgag agctccggac acgcaccgg cggccaccat ggcgcgcta gcgcagtgc tctggaatct gtgtgtcacc ggcgtccctg tcaactcgc caccacagg ctgagccggg cgggctccc tgcggtgccc cggcagcag gtcacatggt tggagaatgc tgaaggctac cccatcgag ccaagatttg cgtgctgac cctttccaga tggagaatgt gcaagtctac ctgcgggag ccttcaagat catgtcaag aggtgtaaca accgaacca gtgcgtggtg gtgcggggt cggatgcctt tctgacccc tgtccctggga cctacaagta cctggagggtg cagtacgact gtgtcccta caaagtggag cagaagtct tctgtgccc agggaccctg cagaaggtgc tggagccac ctgcacacac gactcagagc accagtctg cgtatggtg aaggaccgc tgcaggcggg tgaccgcac tactgtatgc cctggatccc ctaccgcag gacacactga ctgagtatgc ctggtgggag gactacgtgg cgcgccgca caccaccac taccgctgc ccaaccgctt ggtgggaca ggccttggtg tctacgatgg tgccgtcttc tacaacaag agcgacgcg caacatctgc aagtatgacc tacggacgcg catcaagagc ggggagacgg tcatcaatac cgcacaactac catgacacct cgcctaccg ctggggcgga aagaccgaca ttgacctggc ggtggacagc aacgggctgt ggtcatcta cggcactgag ggcaacaac ggcggctggt ggtgagccag ctgaacctct acacactgcg cttgagggc acgtgggaga cgggttacga caagcctcg gcaccaacg ccttcattgt gtgtggggtc ctgtacgtcc tgcgtccgt gtacgtggat gatcacagc aggcggctg caaccgctg gactatgcct tcaacaccaa tgccaaacgc gaggagcctg tcagctcac cttcccaac ccctaccagt tcatctctc cgttgactac aacctcgcg acaaccagct gtacgtctg acaactatt tctgtgtgctg ctacagcctg gacttcggc cgcgcgccc </p>	Homo sapiens

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523 160390 Cadherin EGF NM_001408
LAG Seven-
Pass G-Type
Receptor 2
(CELSR2)

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Homo sapiens

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sapiens

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SEQ ID NO:	Gene	Source ID	LPID	Peptide	SpeciesName
692	5-HT1A Receptor	P08908	595	CAPASFERKERNNAEAKRKM	Homo sapiens
693	5-HT1A Receptor	P08908	608	GRIFRAARFIRIKTVKKVE	Homo sapiens
694	5-HT1A Receptor	P08908	610	RIPEDRSDPDACTISK	Homo sapiens
695	5-HT1A Receptor	P08908	612	RHGASAPQPKKSVNGE	Homo sapiens
696	5-HT1B Receptor	P28222	585	KQTPNRTGKRLTRAQLTID	Homo sapiens
697	5-HT1B Receptor	P28222	586	SPGSSSVTSINSRVPD	Homo sapiens
698	5-HT1B Receptor	P28222	598	KVRVSDALLEKKKLMA	Homo sapiens
699	5-HT1B Receptor	P28222	599	ANLSSAPQNCQSAKD	Homo sapiens
700	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	5-HT1D Receptor	P28221	588	QEASNRSLNATETSEA	Homo sapiens
702	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	5-HT1D Receptor	P28221	590	KAQEEMSDCLVNTSQIS	Homo sapiens
704	5-HT1E Receptor	P28566	815	RHLNRSTDQNSFASC	Homo sapiens
705	5-HT1E Receptor	P28566	817	CTEASMAIRPKTITEKM	Homo sapiens
706	5-HT1E Receptor	P28566	818	DNDLHPGERQQISST	Homo sapiens
707	5-HT1E Receptor	P28566	2738	CVSDFSTSDPTTEFEK	Homo sapiens
708	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	5-HT1F Receptor	P30939	604	ESGEKSTKSVTSYVL	Homo sapiens
710	5-HT1F Receptor	P30939	606	DKCKISEEMSNFLAWLG	Homo sapiens
711	5-HT1F Receptor	P30939	864	IAKEEVNGQVLESSE	Homo sapiens
712	5-HT1F Receptor	P30939	869	STVPSLRSEFKHEKSWR	Homo sapiens
713	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSNIRNLSC	Homo sapiens
714	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVFEKGC	Homo sapiens
715	5-HT2A Receptor	CAA01675.1	1108	PGSYTGRRITMGSSINEQKAC	Homo sapiens
716	5-HT2A Receptor	CAA01675.1	1109	CSMVALGKGHSEEAASKNSD	Homo sapiens
717	5-HT2A Receptor	CAA01675.1	1110	NTIPALAYKSSQLQMGQ	Homo sapiens
718	5-HT2B Receptor	P41595	1111	KGIEDVDNPNNTTC	Homo sapiens
719	5-HT2B Receptor	P41595	1112	CSSPEKVAMLDGSRKDKA	Homo sapiens
720	5-HT2B Receptor	P41595	1113	RRITSGKKSQVQTISNE	Homo sapiens
721	5-HT2B Receptor	P41595	1114	CNVRATKSVKTLRKRSK	Homo sapiens
722	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVVEEQG	Homo sapiens
723	5-HT2C Receptor	P28335	1115	CKRNTAEENSANPNQDQNA	Homo sapiens
724	5-HT2C Receptor	P28335	1116	GHTPEPPGLSLDFLC	Homo sapiens
725	5-HT2C Receptor	P28335	1117	CNVKVEKKPPVRQIPRV	Homo sapiens
726	5-HT2C Receptor	P28335	1118	IGLRDEEKVFVNNTTC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHNEPVEIKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSLVHLIGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVSPVAIVTDIFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKFDGVQNWPAIS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NNIGIIDLEKRFNG	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRPQSADQGHSTHRMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERYRPSILGQTVP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGQWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	VTAKEHAHQIQLQAGASSESRP	Homo sapiens
736	136	5-HT4 Receptor	CAA73107.1	2683	KSFRRAFLIILCCDDE	Homo sapiens
737	136	5-HT4 Receptor	CAA73107.1	2684	VTAKEHAHQIQLQIRAGA	Homo sapiens
738	136	5-HT4 Receptor	CAA73107.1	2685	KEHAHQIQLQIRAGA	Homo sapiens
739	136	5-HT4 Receptor	CAA73107.1	2686	VTAKEHAHQIQLQIR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPRRQASLASPSLRIS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMRDFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAANFFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARKSAKHKFGPRPVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKKHERKNISIKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLPRAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAA17544.1	8	CHKPSILTYIAFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAA17544.1	9	NGSMGEPVIKCEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAA17544.1	10	NKKVSASSGDPQKYGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAA17544.1	11	NDHFRCQPAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPPIDEDLPEEKAE	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPPIDEDLPEEKAE	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAA17544.1	303	MPPSISAFQAAYIGIEVL	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNITGLPDVLLSHLKGVC	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVYITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRGQEPFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIREFRQIFRKIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNNCTEPWDGTTNES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	GRGLQRTLMDSRITLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDRFYTHKISRVLIC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSGNGQAGVQP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGKKNPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MLETQDALYVALELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIIRNKLNSLNSKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSEYHRNVTLSC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKFKETYLILKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRRIWLALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVLPREEIFFIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETADIIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVTMRRTAVILT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELDADFKKMIFC	Homo sapiens
774	376	Alpha 1d-adrenoceptor	AAA35496.1	12	RSTTRLEAGVKRERGKASE	Homo sapiens
775	376	Alpha 1d-adrenoceptor	AAA35496.1	13	KEVPDPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMNSKELTLRIHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSQSRKDSLDGSGC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPL	Homo sapiens
781	377	Alpha 1b-adrenoceptor	P35368	699	KLLTEPSPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTKTHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRGSARITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSLKTDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPGLGPERSAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEPAPAGPRDIALD	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RGPGATGIGTPAAGPGEE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	IVKGDQGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGRPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSGSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPPPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRAIRSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMAAGRQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTTAULT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRIMKEYSDEGHNVATC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIIDVITQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRTS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAA51667.1	1357	RVFREAQKQVKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAA51667.1	1358	CERRFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAA51667.1	1359	ANGRAGKRPPSRILVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAA51667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAA51667.1	1361	CLARPGPPSPGAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAA51667.1	1362	CNGGAAADSDSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVIMVYVYSRVFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRLAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRPPARLLPRL	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGTYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMTDESDT	Homo sapiens
825	692	Bombesin Receptor Subtype-3	AAA35604.1	20	SITNDESSSSWSNDNTNIK	Homo sapiens
826	692	Bombesin Receptor Subtype-3	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCTSPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLNIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFAQLFCCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLISINDTE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADISLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAEDR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SGGHHNNSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CYGVVHRLRQAQRPP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFSPWRRSSSESENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTTFEDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWEFHTHC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILSVQDFLTHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVYSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYIPFLPSEKLETS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADIRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MINATEVDTITQDETYYNSY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESIYNVLYESIPKPC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSYTQSTMDHDLHD	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETILEVLQDCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHTYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDYIGDNTVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQRSSEAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRGWSSCRHRRSSMSVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKFDLGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDFSSPCDAELIQING	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHQLKRCQNHNTKAIR	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SGIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSDYDGENEDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVINDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRLGRLQRPSSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMSGDYDSMKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRMTDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIISKLSHSGHGKQKALK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KILSKGKRGGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMNDRLD	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGPIEDHETSPIDNSD	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQIGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPSADSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNPVDKTSNTLRVPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAVAIVRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTFILLRTWSRRATRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRLRKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVTSDGPGYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCGENFMIDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVKVQVTRPDQARMDIR	Homo sapiens

883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAGPLDNSMGDS	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADTFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSSEKENEENIQ	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKDYMLSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEEAPRSSVTEADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCLAHWKKC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMPGRQELL	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGVEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGIPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMPGPR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASLNHSHKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RISAVNSIFLSHNNTKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTKFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKTS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSEWEGHIRPTRKPNK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CILNGQVREEYKRWITGKTP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CILNGQVREEYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSUEVFNLHERYYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLVIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSITSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVGEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKGRKYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing factor Receptor 2	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	factor Receptor 2	Q13324	505	DPEGPVSYCNITLDQIGTCW	Homo sapiens
916	Corticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTMITLNLG	Homo sapiens
917	Dopamine Receptor D1	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
918	Dopamine Receptor D1	CAA41734.1	42	KAKTPSPDGNATSLAETID	Homo sapiens
919	Dopamine Receptor D1	CAA41734.1	43	CSQPESFKMSFKRE	Homo sapiens
920	Dopamine Receptor D1	CAA41734.1	44	EDLKKEAAAGIARPLEK	Homo sapiens
921	Dopamine Receptor D5	P21918	1407	PWEEDFWEDVNAENC	Homo sapiens
922	Dopamine Receptor D5	P21918	1408	CAPDTSURASIKKETK	Homo sapiens
923	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	Dopamine Receptor D5	P21918	1410	QTSPDGDPAESVWELDC	Homo sapiens
925	Dopamine Receptor D2	P14416	1403	KRSSRAFRHLRAPLKGNC	Homo sapiens
926	Dopamine Receptor D2	P14416	1404	CTVIMKSNQSFVNRRRV	Homo sapiens
927	Dopamine Receptor D2	P14416	1405	KPEKNKGHAKDHPKIAK	Homo sapiens
928	Dopamine Receptor D2	P14416	1406	GKTRISLKTMSRRKLSQKE	Homo sapiens
929	Dopamine Receptor D3	P35462	1398	KQRRRKILTRQNSQC	Homo sapiens
930	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQQTLSPDP	Homo sapiens
931	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERGGE	Homo sapiens
932	Dopamine Receptor D3	P35462	1401	KREKTRNSLPTIAP	Homo sapiens
933	Dopamine Receptor D3	P35462	1402	STSLKGLPLQPRGVPLRE	Homo sapiens
934	Dopamine Receptor D4	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
935	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
936	Dopamine Receptor D4	P21917	1396	PPSPTPAPRLPQDPC	Homo sapiens
937	Dopamine Receptor D4	P21917	1397	PPQTPPQTRRRRRRAKITGRE	Homo sapiens
938	Oploid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	Oploid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIRRDPLWVAALHLC	Homo sapiens
940	Oploid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	Oploid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERVAC	Homo sapiens
942	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVWNSS	Homo sapiens
943	Duffy Antigen	AAC50055.1	1412	NDSFPDGDYDANILEAAAPC	Homo sapiens
944	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKALGMGPGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEAERTCMYEPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRITAKGNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMITETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRLKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGPPDRATPLLTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RSLAPAEVPGKDRTAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PRTIPTPPCCQGPIEKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EEKGSLEEKQSKLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSINLSNVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNTDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGIEKFRFEAEERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLPVDIFLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSSTAFFPLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAHAHAFKVAARATLRSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALVSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVATIMLTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDTAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SYESAGYTVLRILPLVVL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFLTVIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVATIMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDTAANSAS	Homo sapiens

971	1681	Uke Receptor	Follicle Stimulating Hormone	AAA52477.1	58	QESKYTEIPSDLPRNAIELR	Homo sapiens
972	1681	Receptor	Follicle Stimulating Hormone	AAA52477.1	59	DVLEVEADVFSNLPK	Homo sapiens
973	1681	Receptor	Follicle Stimulating Hormone	AAA52477.1	60	RNGHCSSAPRVTSYSTY	Homo sapiens
974	1681	Receptor	Follicle Stimulating Hormone	AAA52477.1	61	RGQRSSLAEDNESSYRGFD	Homo sapiens
975	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2231	CHHRICHCSNRVFLCQE	Homo sapiens
976	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2232	LRVIQKGAFSGFGDLEK	Homo sapiens
977	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2233	LYVMSLLVLNVLAFAVIC	Homo sapiens
978	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2234	CNKSLRQEVDMTQARGQR	Homo sapiens
979	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2236	SDNNLEELPNDVFHGA	Homo sapiens
980	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2238	KLVALMEASLTYPSC	Homo sapiens
981	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2241	SFESVILWLNKNGIQEIHC	Homo sapiens
982	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2248	IHSLQKVLLDQDNINIHT	Homo sapiens
983	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2250	KANNLLYITPEAFQNL	Homo sapiens
984	1681	Receptor	Follicle Stimulating Hormone	NP_000136.1	2251	CYEMGAQYRTETSIVH	Homo sapiens
985	1726	G Protein-Coupled Receptor RDC1		AAA62370.1	1437	TNTPSSRKKMVRVVVC	Homo sapiens
986	1726	G Protein-Coupled Receptor RDC1		AAA62370.1	1439	ARASASSDQEKHSRK	Homo sapiens
987	1726	G Protein-Coupled Receptor RDC1		AAA62370.1	1440	KYSAKTGLTKLIDASRVSET	Homo sapiens
988	1726	G Protein-Coupled Receptor RDC1		AAA62370.1	1893	PDTYVLTVTASNNETVC	Homo sapiens
989	1762	Galanin Receptor GalR1		AAA50767.1	192	GNSLVITVLARSKPGKPR	Homo sapiens
990	1762	Galanin Receptor GalR1		AAA50767.1	193	PRASNQIFCWEGWDPDRHKK	Homo sapiens

991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNMSKSEASKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVTVLARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFDQRULER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRRLGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISSHSADLPVNDWHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRGAGTRELALAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGGLPGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSGSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGDCY	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYSQKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQPWRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEKGKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRPLALXNSKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNQSKNNIPRARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFSGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPFEGPNVHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKLR	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVSP	Homo sapiens
1021	1951	Growth Hormone Secretagogue Receptor	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Growth Hormone Secretagogue Receptor	Q92847	582	GVEHENGTDPPWDINEC	Homo sapiens
1023	1951	Growth Hormone Secretagogue Receptor	Q92847	583	KLWRRRRRGDAVV GASL	Homo sapiens
1024	1951	Growth Hormone Secretagogue Receptor	Q92847	584	SQRKLSTLKDESSRAW	Homo sapiens
1025	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	833	REDESACLQAAEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFSHFSSEGA VKRD	Homo sapiens
1027	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	835	VRKLEPAQGSUHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEIRKWHGHDPPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRRDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQHRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVSQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQVVSGLHMINRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYRIFKIVARDQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHISWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVVRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLRNASQLSRTGSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDDDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAYLRDIDGMNK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMRERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSEN	Homo sapiens
1045	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1433	KMHNGAFRGATGPKTLD	Homo sapiens
1046	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1434	CESTVRKVSNTLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1435	FAVRNPELMAINKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Chorionadotro pin Receptor	Q14751	1436	CKRRAELYRRKDFSAYTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRITMRMSRHSSGPRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTSSDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVVAVWQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RUHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLIYAFRSLELRNTFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor	P41968	563	IVHSDVLTIFEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R)	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R)	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1033	KRIAVLPGTGAIRQGA	Homo sapiens
1063	3058	(MC4R)	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1035	NSTDIDAQSFTVNIDN	Homo sapiens
1064	3058	(MC4R)	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1469	NSTRGMHTLSHLWNRSSYR	Homo sapiens
1065	3059	(MC5R)	Melanocortin 5 Receptor (MC5R)	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R)	Melanocortin 5 Receptor (MC5R)	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R)	Melanocortin 5 Receptor (MC5R)	P33032	1025	MNSSFHLHFLDINLNAT	Homo sapiens
1068	3059	(MC5R)	Melanocortin 5 Receptor (MC5R)	P33032	1026	RYHHIMTARRSGAIAG	Homo sapiens
1069	3061	(MC1R)	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1036	QGSQRRLLGSLNSTPT	Homo sapiens
1070	3061	(MC1R)	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R)	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R)	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1040	CQHAGGIARLHKRQRP	Homo sapiens
1073	3079		Melatonin Receptor type 1a	AAB17720.1	214	HSLKYDKLYSSKNSLC	Homo sapiens
1074	3079		Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens
1075	3079		Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRKPKLKP	Homo sapiens
1076	3079		Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens
1077	3080		Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens
1078	3080		Melatonin Receptor type 1b	P49286	931	LVAIFYDGGWALGEEHC	Homo sapiens
1079	3080		Melatonin Receptor type 1b	P49286	932	LVLQARRKAKPESRLC	Homo sapiens
1080	3080		Melatonin Receptor type 1b	P49286	933	CIQDASKGSHAEGLQSPA	Homo sapiens
1081	3080		Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens
1082	3081		Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPDPNQLAE	Homo sapiens
1083	3081		Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens
1084	3081		Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens
1085	3081		Melatonin-Related Receptor	Q13585	754	HPKPAAADNPELSASHC	Homo sapiens

1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESASSPAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMINKGVVRSVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNITFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKILYNVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLGEVVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPFRPADTHNEVRFDR	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLRC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGFLPINEKGTGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTKVDEAEYMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNYEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMNSIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPIITKPERWVG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMHWPGSGGQLPRSC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYINVGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVWSKSNIRSV	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQIAVVKPEPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAEHFPAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPITLSHRAGSARTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAAKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDGDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLSSGTGSDSDTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSGDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAGSVRIPIQERKORTIDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWKGKGVREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLDTPNSRAVVI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELGYIRA	Homo sapiens

1126	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	924	KVEDMGWAHRETHPASVC	Homo sapiens
1127	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	925	CESLETNTSSTKITVISYS	Homo sapiens
1128	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	1894	KFYWILTMIMQRTHSQEYVHS	Homo sapiens
1129	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	231	DGNLSDPCGPNRTNLGGRDS	Homo sapiens
1130	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	233	IKALVTIPETTFQTVS	Homo sapiens
1132	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	234	RIRQNTRDHPSTANTVDR	Homo sapiens
1133	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1325	SERSQPGAEQSPETPPGRC	Homo sapiens
1134	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1326	CRAPRLQLQAYSWKEEE	Homo sapiens
1135	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1327	SSEGEPPGSEVVIKMP	Homo sapiens
1136	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1328	KQPPRSSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1329	CRWDKRRWRKPKRPGS	Homo sapiens
1138	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1331	DSTSVAVASNMIRDDE	Homo sapiens
1140	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1332	ENTVSTSLGHSKDENSEKQTC	Homo sapiens
1141	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1333	DEKQNIIVARKIVKMTK	Homo sapiens
1142	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	218	SRSRVHKHRPEGPKEKAKT	Homo sapiens
1144	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	219	KKPRPGGRRGGLRNGKLEEA	Homo sapiens
1145	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	220	DKDTSNESSGSATQNTKER	Homo sapiens
1146	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	221	RPAANVARKEFASIRNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAERKPAHRAFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAEETEIFV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSGPWANLTNQFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATRPDPFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLTASLAAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSPQ	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTITELVRC	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISSLDNSSFTAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSVGERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPEPIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKISKRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSLIEIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRILDAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAADENGQTEEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTINLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSKALEFLADKVC	Homo sapiens
1170	3405	Neuropeptide Y Receptor	P50391	1070	CYARIVRRLQRQGRVFKG	Homo sapiens

1171	3405	Type 4 Neuropeptide Y Receptor Type 4	P50391	1071	CQQSAPLESEHLPLST	Homo sapiens
1172	3405	Neuropeptide Y Receptor Type 4	P50391	2275	SEHCQDSVDVMFVITS	Homo sapiens
1173	3406	Neuropeptide Y Receptor Type 5	Q15761	1072	MKKRNQKTTVNFLGN	Homo sapiens
1174	3406	Neuropeptide Y Receptor Type 5	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Neuropeptide Y Receptor Type 5	Q15761	1074	NLTLPSSKSGPQVKL	Homo sapiens
1176	3406	Neuropeptide Y Receptor Type 5	Q15761	1075	SFIKHRRRYSKKTAC	Homo sapiens
1177	3406	Neuropeptide Y Receptor Type 5	Q15761	1076	PERPSQENHSRLPEN	Homo sapiens
1178	3406	Neuropeptide Y Receptor Type 5	Q15761	1077	CFEIKPEENSVDVHELTV	Homo sapiens
1179	3408	Neurotensin Receptor Type 1	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	P30989	936	CHPFAKATLMRSRTKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	P30989	937	GEQNRSDGQHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	P30989	938	RQAAEQGGQVCTVGGHS	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	P30989	939	CPVWRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	941	PVAIMGSAQVEDEEIEC	Homo sapiens
1186	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	942	GVGPSSETAVAILRFC	Homo sapiens
1187	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	943	CASALRRDVQVSDRVRSIAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2123	TPEPRPRTPQPMASPRGLTFC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2124	TAVASLLKGRQGIYTE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OAI)	NP_000264.1	2125	EMQIDINGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OAI)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OAI)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OAI)	NP_000264.1	2128	NPASGKVSQVGGQTS	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHIPLKAQNLDISRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKIFIKSHLKSSRNSTIS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKSSRNIFSVFVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRLGSETSASKSNSSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y ₁ , G-protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSEDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y ₁ , G-protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y ₁ , G-protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGGLPRAKRK	Homo sapiens
1205	3589	Purinergic Receptor P2Y ₁ , G-protein coupled, 2 (P2RY2)	AAC04923.1	857	TGSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y ₁	CAA07339.1	386	RYSGWVWPLKSLGLKKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y ₁	CAA07339.1	387	SGTGVRKNKTTTCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y ₁	CAA07339.1	388	RALIYKDLDNSPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y ₁	CAA07339.1	389	DTFRRRLSRATRKASRRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y ₅	P43657	850	FVQSTHSQGNNAEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y ₅	P43657	851	MVLKTLIKPVTLSRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y ₅	P43657	852	TIQNSIKMKNWSVRRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y ₅	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y ₆	Q15077	874	CTSRRLTRTAVVTIN	Homo sapiens
1215	3597	Purinergic Receptor P2Y ₆	Q15077	875	ASERRGKAARMVAVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHLLQKLIATK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFITN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKRPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTETPLTKPSPALQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRRLGNATANNTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	248	KAKVQCELNITACLQEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	249	ESLIMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	250	NSEQDCPLPHSHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	251	EETIKEDSGRQGGDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	763	LYSGATLDEAERLITEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPFLFRFNPDQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDSDMGVVSRRNC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRYFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDSDMGVVSRR	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTTGDLNTTKV/QC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFHFRKRIEGLRKR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNMKGKGGEQMIHEKIPYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSYGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKPKF	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMINERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRKNISKASRSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RSKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLTMIKMRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSRKVANHNNSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEDLPHTDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGRGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQYVGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIACTIMVYPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKSSKHKALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVKTLKNLGC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDVYSLESDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNHNTLCYNNFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAELK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HLRRLRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSGERQRLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SWRVSVKLRNRWPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTQSQADWDRAARRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLVAWPRKIA	Homo sapiens

1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCISSLAQRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRVPAAVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRPLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVITIGUVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGVITISL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFSSSESQRSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSSTETSDSHLTK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTIHAEDFARRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFKPGSRRLID	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTUDDKPYC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQPKYAKELKNTC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRISKLPKVKEKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLRSLRKRSFRSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMAAASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRITMINIVPRTKV/K	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTIITKDSVDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCRI0	P46092	1152	ALLFSQDGGQREGQRRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCRI0	P46092	1153	SGDEEDAYSAEPLPELC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCRI0	P46092	1154	ALLDITADLLAARERSC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCRI0	P46092	1155	RRLLRGSSPSGPQPRRGC	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KSGGRHHLSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLFHLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEREPSSGDVSMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPVTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQITANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	EINMQSESNTVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKITFEDSEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRLPQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1	AAH01736.1	1539	KGVGRAVGIGGGGCGQATE	Homo sapiens
1307	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1565	RMSSVAPASQSRIRLTKR	Homo sapiens
1308	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1567	RAVSNAGTADDEERTESKG	Homo sapiens
1309	3861	G Protein-Coupled Receptor SLC/MCH1	O00155	376	RGLQLPGGQDSQCCEEP	Homo sapiens
1310	3861	Receptor GPR25	O00155	377	CRISRLRRPPHVGRARRNS	Homo sapiens
1311	3861	G Protein-Coupled Receptor GPR25	O00155	378	RTGLARRISSASSLSRDD	Homo sapiens
1312	3861	G Protein-Coupled Receptor GPR25	O00155	483	DYSGLDGLEELELCPAGD	Homo sapiens
1313	3862	Receptor GPR25	AAB60402.1	118	TWCLLGDAHSPLYT	Homo sapiens
1314	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	G Protein-Coupled Receptor GPR3	AAB60402.1	121	GLITCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR3	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	G Protein-Coupled Receptor GPR31	O00270	1158	CHSFYSRADGFSFIWQEA	Homo sapiens
1319	3863	G Protein-Coupled Receptor GPR31	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	G Protein-Coupled Receptor GPR31	O00270	1160	SPTFRSSVRRVFHTLRGKGQ	Homo sapiens
1321	3864	Receptor GPR31	AAA98457.1	143	DELFRDRYNHTCFEKFPM	Homo sapiens
1322	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	144	LRVAVRGSVSTERQEKAKIKR	Homo sapiens
1323	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	145	RSDVAKALHNLLRFLASDK	Homo sapiens
1324	3864	G Protein-Coupled Receptor GPR4	AAA98457.1	146	NASLTLETPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQVLVPSETVSLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVVRICQVWRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEQGRRCVCVLFPPQE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RLHAMRLDASHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRRLRLQLTIC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHINATFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VRLRSKAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDNFRKNFRSLRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDFLEIDKKNCCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWLSLRQRQMDRHAQIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKNITGEPDNNRSTVE	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTIRGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAQIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNINHKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQSKRKDQI	Homo sapiens

1345	3870	Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETHRDLARLG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostaglandin Receptor	P43119	1188	CRMYRQQKRHQGSLGPRPT	Homo sapiens
1349	3921	Prostaglandin Receptor	P43119	1189	CFQAVAPDSSEMVD	Homo sapiens
1350	3921	Prostaglandin Receptor	P43119	1190	ASGRDPRAPSAVVGKESGSC	Homo sapiens
1351	3921	Prostaglandin Receptor	P43119	1191	SAWGEQVEPLPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKGN SAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLYAMHRLQRHPKSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAERADGREASQPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEEAEDIRALR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHRARWR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPDSSRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAHDMVMVGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGVDVC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3	Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3	Prostaglandin E Receptor	P35408	382	RLSDFRRRRSFRRIAGAE	Homo sapiens
1370	3927	EP4	Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRIAS	Homo sapiens
1371	3927	EP4	Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRFSISRE	Homo sapiens
1372	3927	EP4	Prostaglandin E Receptor	P35408	385	RTLRIETSDSSQGQDSE	Homo sapiens
1373	3928	EP4	Prostaglandin F2-alpha Receptor	P43088	1046	ILMKAYQRFRQSKAS	Homo sapiens
1374	3928	EP4	Prostaglandin F2-alpha Receptor	P43088	1047	ASDKIEWIRFDQSNVLC	Homo sapiens
1375	3928	EP4	Prostaglandin F2-alpha Receptor	P43088	1048	TKPIFHTKITSKHVK	Homo sapiens
1376	3928	EP4	Prostaglandin F2-alpha Receptor	P43088	1049	CFVNTEDIKDWEDEFY	Homo sapiens
1377	3928	EP4	Prostaglandin F2-alpha Receptor	P43088	1050	RVKFKSQQHRQGRSHLE	Homo sapiens
1378	4051	EP4	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLUGKVDGTS	Homo sapiens
1379	4051	EP4	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	EP4	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	EP4	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKS SYS	Homo sapiens
1382	4052	EP4	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNNLAKPTLPIKTR	Homo sapiens
1383	4052	EP4	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLVKNATMG	Homo sapiens
1384	4052	EP4	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITICHDVHNTCESSSP	Homo sapiens
1385	4052	EP4	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	EP4	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGETPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	RSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQRILALANR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTICCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNESFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLTYSLHGY	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGSDDGC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDNRNFTSFL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLGKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSRQTDGLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPRFLMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCDAAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MRLRTQETIRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDAVNMFTSIYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSSKRKKSE	Homo sapiens
1410	4481	Somatostatin Receptor Type 2	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

1411	4481	2	Somatostatin Receptor Type 3	P30874	1001	KQDKSRINETTETQRT	Homo sapiens
1412	4481	2	Somatostatin Receptor Type 3	P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
1413	4482	2	Somatostatin Receptor Type 3	P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
1414	4482	3	Somatostatin Receptor Type 3	P32745	2622	REGGKGKEMNGRVSQI	Homo sapiens
1415	4482	3	Somatostatin Receptor Type 3	P32745	2624	TTSEPENASSAWPPD	Homo sapiens
1416	4482	3	Somatostatin Receptor Type 3	P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
1417	4483	4	Somatostatin Receptor Type 4	P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
1418	4483	4	Somatostatin Receptor Type 4	P31391	1008	CLLEGAGGAEEEPIDY	Homo sapiens
1419	4483	4	Somatostatin Receptor Type 4	P31391	2627	KMRAVALRAGWQQRR	Homo sapiens
1420	4483	4	Somatostatin Receptor Type 4	P31391	2631	CRAVLSDGLNMFSTV	Homo sapiens
1421	4483	4	Somatostatin Receptor Type 4	P31391	2633	CLVGLVGNALVIFVIL	Homo sapiens
1422	4484	5	Somatostatin Receptor Type 5	NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
1423	4484	5	Somatostatin Receptor Type 5	NP_001044.1	2638	CLRKGSQAKDADATEP	Homo sapiens
1424	4484	5	Somatostatin Receptor Type 5	NP_001044.1	2639	RIRQQQEATPPAHRAAA	Homo sapiens
1425	4484	5	Somatostatin Receptor Type 5	NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
1426	4552		Tachykinin Receptor 1	AAA36641.1	1339	CMIEWPEHPNKIYKV	Homo sapiens
1427	4552		Tachykinin Receptor 1	AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens
1428	4552		Tachykinin Receptor 1	AAA36641.1	1341	KVSRLETTISTVVGAAHEE	Homo sapiens
1429	4552		Tachykinin Receptor 1	AAA36641.1	1342	EPEDGPKATPSSDLTSNC	Homo sapiens
1430	4687		Thrombin Receptor	P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
1431	4687		Thrombin Receptor	P25116	2582	AVANRSKSRALFLSAAVFC	Homo sapiens
1432	4687		Thrombin Receptor	P25116	2583	SINKSSPLGKQLPAFISE	Homo sapiens

1433	4687	Thrombin Receptor	P25116	2621	DPRSFLLRNPNDKVEPFWE	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDST	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRLKLCNCKQKPTTE	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVTD	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDDIFKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAIPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYGSVYFPLSQRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLTKNSYGNRITRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPIITWLQGKRESMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDITRPEEFDHYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HITRTIYLLARLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVNRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSGAEG	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEKFNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQTFYSNNRSPNTSGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATTPWLGRDELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELDGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSGEPRLTRDPLARAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGSGAHWNRPVLVWAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVPGPSE	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRTPINAIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSMTMVA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNRDWSDQIDVTK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKFRAMLAMFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSTDA	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRVVDREQEENGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRPSFEAAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKKKQRAQSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKHRAGQMSEPHSGLTKC	Homo sapiens

1481	5521	Inhibitor 3				979	CTDNLRLRGADMDIVHPQER	Homo sapiens
1482	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242			980	SRSETGSTISMSSLERR	Homo sapiens
1483	6031	SIV/HIV Receptor BONZO	O00574			1101	NDSSQEEHQDFLQFSK	Homo sapiens
1484	6031	SIV/HIV Receptor BONZO	O00574			1102	KATKAVNQQAQAKRMTWG	Homo sapiens
1485	6031	SIV/HIV Receptor BONZO	O00574			1103	KTLHAGGFGQKHSK	Homo sapiens
1486	6031	SIV/HIV Receptor BONZO	O00574			1104	SLKFRKNFWKLVDIGC	Homo sapiens
1487	6031	SIV/HIV Receptor BONZO	O00574			1105	KSEDSKITSASHNV	Homo sapiens
1488	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			66	ERHRSVMAVQLHSLRPRGR	Homo sapiens
1489	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			67	RRRVQIRMAEHVSCHPRVRE	Homo sapiens
1490	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			68	NAAVVSCRDAEMRRTRRR	Homo sapiens
1491	6204	Lysophosphatidic Acid Receptor Edg4	AAC27728.1			69	RQSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213	C-C Chemokine Receptor 5	AAC50598.1			38	YSQYQFWKNFQILK	Homo sapiens
1493	6213	C-C Chemokine Receptor 5	AAC50598.1			39	QGEAPERASSVYTRSTGEQE	Homo sapiens
1494	6213	C-C Chemokine Receptor 5	AAC50598.1			40	RSQKEGLHYTCSSHFPYSQ	Homo sapiens
1495	6213	C-C Chemokine Receptor 5	AAC50598.1			309	MDYQVSSPIVDINVTSEPC	Homo sapiens
1496	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1092	EDEYDVLIERGELESDEAEGC	Homo sapiens
1497	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1093	KGNFFSARRRVPCGIITSVL	Homo sapiens
1498	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1094	MRKTLRFREQRYSLFKLVFA	Homo sapiens
1499	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421			1096	RSNTPLQPRGSAQGSRE	Homo sapiens
1500	6446	Pael Receptor (GPR37)	AAC51281.1			127	GPNSARDVLRARAPREEQG	Homo sapiens
1501	6446	Pael Receptor (GPR37)	AAC51281.1			129	DPGGPRRGNSNRRVRKNP	Homo sapiens
1502	6446	Pael Receptor (GPR37)	AAC51281.1			130	LRQLSKEDLGFSGRAPAERC	Homo sapiens
1503	6446	Pael Receptor (GPR37)	AAC51281.1			131	PRGAVISGRSGEGSVKTVPG	Homo sapiens
1504	6446	Pael Receptor (GPR37)	AAC51281.1			1781	CIQKSTVTSDDNDNEYTE	Homo sapiens
1505	6446	Pael Receptor (GPR37)	NP_005293.1			1806	CIQKSTVTSDDNDNEYTE	Homo sapiens
1506	6536	Putative Neurotransmitter Receptor (PNR)	O14804			319	TDWVETRUSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLQKVFSPQTR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKIVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLTNPQMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIAPOGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFHLKRPQQGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLRSPGMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRWSTRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGLALYRFIRKQR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSTRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPILFASRRQSSARRTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEPOSQSLSLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPVAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDLHMSEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPDQLGLDLEQGLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETGEPLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLGPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKSRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRSTESRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTIRKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSTNTVPDSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKERKHLTEKFYSMRSSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLYPLERKISDAKR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLPLPLGNTPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELIQTQVPKVGRVERKMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAQNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDDKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAYKDKVVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKIVIRLKRNNIMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTLALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAQILLAFENDDC	Homo sapiens

1555	9834	Type 1 Coricotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSASNISDNGYRE	Homo sapiens
1556	9834	Coricotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKV/HYHVA	Homo sapiens
1557	10457	Fitzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Fitzled-2	NP_001457.1	1775	GGAPPRVATLEHPFHC	Homo sapiens
1559	10457	Fitzled-2	NP_001457.1	1776	CEPARPDGSMFFSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRPRPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAGQSFHGCPLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVRPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PPFLDAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPFLVWGRKKMMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVWPNGELVRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNGRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPNRPANNGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFRRLRSTLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STVFNGKYNTQGSDVCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMINRSCQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQISETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDRLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRIDNPKSWYE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLIGEPTNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAEISPELQRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYVV	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNAVVRVHNGSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KYPERIRRRIRQPSTVYC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDLRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYYDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPYHRLTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLIVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPEETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKILEPWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEPKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEVWCRGEREVVGPVKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRLDSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPQP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAAYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLP SARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210	NP_057456.1	1524	QGTLILYPDALHSAED	Homo sapiens
1605	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	G Protein-Coupled Receptor LOC51210	ENSP00000164265	2030	SVVQLRRQRDPFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	G Protein-Coupled Receptor Ls19072	ENSP00000164265	2047	AVQVGRQADRRRAFTPT	Homo sapiens
1609	19501	G Protein-Coupled Receptor Ls19072	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	Receptor KIAA0758	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1518	RLANNTGGWDSSGCVWEEGD	Homo sapiens
1613	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1519	CKQEKSLFQISKSIG	Homo sapiens
1614	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2164	CTAFQRREGGVPGTRPGSPG	Homo sapiens
1615	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2171	QNPPEPEPPADQQLRFRC	Homo sapiens
1618	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	426	TLARPDATGSQRRRKTVRL	Homo sapiens
1621	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	427	RSKLVAASVPARDRVRG	Homo sapiens
1622	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	428	AQSERSAVTIDATRPD	Homo sapiens

1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPPIHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGILLNNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAGGEAFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	COLLRRRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEILLTEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRAAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTMDHKIRDALR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSGSSKSDVVIIMRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNRSDDGPGKNTLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRKRRKHNGSIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRLLFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRIVYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLTEEGGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRTRGRKNSSTSSSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRVYRPFVQRQRISR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGTFSCSDSGNL	Homo sapiens

1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIYKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NGGDNSSMDDLHKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDFLLDFFED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQLUSETAVVTN	Homo sapiens
1652	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTLLEQMMDDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNGSISLRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKFEKFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRVSSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNINSVPGKEHPDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKPQATVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIGPSGKD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKTLLTSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRIKKKQLGAGRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DFTGQGHMFNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNNVPASAGNQTKTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMVVNVVSSLSNEPED	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNING	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLLTPRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFQGGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELLSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFLIG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRDRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRLRLFFHVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIESTESFNDDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATGNRRFQFTGNQKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPEDINSPEHIGRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNVP	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLKIRSEK	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLSVNHRRHTLTKLMHIVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFTLSHRKVTDRVSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLGYNKNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSYEIQGQSMKRSNRK	Homo sapiens

1690	56923	Receptor M3	P20309	1422	KPSSEQMDQDHSSDSWNIN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAGKSD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Muscarinic acetylcholine Receptor M3	NP_062813.1	2097	PPTCRPRRMSVCYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARGVR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTPQLKVVGQGRNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMPRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSR	Homo sapiens
1702	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDDLPPSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHSLGRRWQLGRRLC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRTNSVSPISE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVYHGQEAQQRPDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRITE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLPRLSTRPRRVSLC	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPSLTLRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTHFKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILRTLFRSRKRRIHRTVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTLFRTQIIRSCEAKQQL	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPSPGAFAYE	Homo sapiens
1718	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1589	RIEPVYSINSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQLTKRNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNQNVNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVNIR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKKKFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFSELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMIDYPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRAVPGHQAHGANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLEIPTSLSTRVNR	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVVAVPEDSGGKILL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHYVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKYIVRNPNQYNPGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRGAQAYRGQRVPKNSID	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SRSRFRNTNESGEVTT	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVVCGPYFRGWNN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEEVITFFDYDGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLNFMTGMPPADEYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLPFLFRGAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYSSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETILNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EEPTNISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RNPFTVYTHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHRSRNDICRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFDEMQRPRQKDNK	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFAVQYKLSRRPL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTTEQVRSNGEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTNEGRGVGGGEGMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLRNQGSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLRPDPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPSGGSNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal	P41587	1306	CGSSFSRNGSEGAALQFHR	Homo sapiens
1761	160055	Polypeptide Receptor 2		132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPTAEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGRHQ	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRDITAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGIKTVC	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAFFPLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTTHRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRLLVAADV	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGSPDPAAPHAEHLRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCPGCCGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMIR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMIR)	O15218	391	NVLTAQRURQPGQPKSRRHC	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMIR)	O15218	392	KDQTKAGTCASSSSCSTQ	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMIR)	O15218	484	KGDSQPAAPAAHPPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNIVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKMWNGCTHCYLAFNSD	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMLKEIYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEFEFLSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRTSSFA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEGHLELEPGRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMRTQTVTTWV/LHLALSDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYFVFRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYNNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFVTSIAFFNSVANPVL	Homo sapiens

1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEPRGPARTLLGWLLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPTGTPLNRLSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRARFSPSEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFHYSVVDVCIFE	Homo sapiens
1807	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	161	GKVEKYMCFHNMSDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQQK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKGSISFFLGISM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMINIRAHPRSVQLVLQ	Homo sapiens
1811	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	2	AQRPTDVGGQAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYTSKLSDANC	Homo sapiens
1815	160221	Receptor GPR27 G Protein-Coupled	LR6	335	FPFVLDGGGGDEDPACALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGSGGEEAAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	Q54897	515	GLRALACLPAVMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARRLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADQSAEALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAESQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPKDGGTDPDSGQELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Spingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLSRMIRE	Homo sapiens
1833	160225	Spingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Spingolipid Receptor Edg6	CAA04118.1	72	RLVQASGQKAPRPAAR	Homo sapiens
1835	160225	Spingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPRD	Homo sapiens
1836	160225	Spingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGQKAPRPAAR	Homo sapiens
1837	160225	Spingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPRDSFRGSRSLSRM	Homo sapiens
1838	160225	Spingolipid Receptor Edg6	CAA04118.1	1916	RSLSFRMREPLSSISVR	Homo sapiens
1839	160225	Spingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLGALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKWKQAVRHINKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQRRQRKRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNTFLCYDKYPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSNDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQITGVIKIKYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPAKDLPAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSDELSVDDSDKTIG	Homo sapiens
1850	160312	Sphingolipid Receptor Edg5	O95136	1018	ERHVAIAKVKLYGSDKSC	Homo sapiens
1851	160312	Sphingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRPLQC	Homo sapiens
1852	160312	Sphingolipid Receptor Edg5	O95136	1020	QEHYNYTKETLETQET	Homo sapiens
1853	160312	Sphingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1922	MMRKKAKFSLRENPVETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1924	CEQTEKKKKLKRHLAIFRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1925	KKRVGDGGSVLRTHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRERFIMNEKWDINSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNGEQWHVVSRKKQKIHK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPQQLVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RGSAGDRRRLGLSRGTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKPK	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VYDSYRKSCKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSGTNNKTDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13 Proteinase-Activated Receptor 4	O76067	1308	CANDSDTLELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PIRARALRGRRALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQIFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQRSPGDI	Homo sapiens
1871	160330	G Protein-Coupled Receptor TM7XN1/GPR56	Q9Y653	1213	CELRDLQLLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMV/SFEEDR	Homo sapiens
1873	160330	G Protein-Coupled Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEGSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled Receptor TM7XN1/GPR56	Q9Y653	1216	RTLFQRTKGRSGEAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSILLETRKWAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTIENATDIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAELRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHSEHQSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSPGGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMHKRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSFSPDSSPEGPEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSGRGRSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELTGHLVPHHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSGKSPQSYIFLLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPQTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQLQLKPKSEKD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKVKSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDMEEEL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEQLMLRTLDLSYNNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSVANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTAADAAVSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTIKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLRTTEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDILDTRESLFSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMIPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNNVNP	Homo sapiens
1908	160889	Platelet Activating Receptor	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963) Platelet Activating Receptor	O14626	1226	ETFASPKETKAGKEKLR	Homo sapiens
1910	161024	Homolog (H963) Protein A	NP_062832.1	1690	ESRAVGLPLGLSAGRRC	Homo sapiens
1911	161024	Protein A	NP_062832.1	1691	EDARGKRSSLDGSESAK	Homo sapiens
1912	161024	Protein A	NP_062832.1	1692	RTWEGQCVAIMSEEDGD	Homo sapiens
1913	161024	Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024	Protein A	NP_062832.1	1694	RRLSHDETNIESTPRE	Homo sapiens
1915	161024	Protein A	NP_062832.1	1695	GGPPEYLGQRHLEDEED	Homo sapiens
1916	161024	Protein A	NP_062832.1	1696	REEITFIDETLPSP	Homo sapiens
1917	161024	Protein A	NP_062832.1	1697	RRPRPLGLSPRRLSLGSPE	Homo sapiens
1918	161214	Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214	Galanin Receptor GalR3	AAC35944.1	203	GAAAAEARRRATGRAGR	Homo sapiens
1920	161214	Galanin Receptor GalR3	AAC35944.1	204	ASRHFRRFRRLWPC	Homo sapiens
1921	161214	Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRPASSGPP	Homo sapiens
1922	161221	Urotensin-II Receptor (GPR14)	LR15	371	ERYAAVLRPLDTVQRPKG	Homo sapiens
1923	161221	Urotensin-II Receptor (GPR14)	LR15	372	RAYRSQRASFKRARRPGAR	Homo sapiens
1924	161221	Urotensin-II Receptor (GPR14)	LR15	373	RNYRDHLRGRVRGPGSG	Homo sapiens
1925	161221	Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQTD	Homo sapiens
1926	161249	G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPEDJNLTDALRLK	Homo sapiens
1927	161249	G Protein-Coupled Receptor GPR66	LR20	395	IGLRLRRERLLMQEAKGRG	Homo sapiens
1928	161249	G Protein-Coupled Receptor GPR66	LR20	396	RGSAAAARSRYTCRLQQH	Homo sapiens
1929	161249	G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251	Purinergic Receptor P2Y10	O00398	859	CFLLKPFRRARDWKRRYD	Homo sapiens
1931	161251	Purinergic Receptor P2Y10	O00398	860	PFILRSTDLNNKSC	Homo sapiens
1932	161251	Purinergic Receptor P2Y10	O00398	862	QLSRHGSSTPSRLMSKE	Homo sapiens
1933	161251	Purinergic Receptor P2Y10	O00398	863	LRQPPMAFGQISERQK	Homo sapiens
1934	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	YYDDLDDVDVEESAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNVWRRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRILLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEGKEGPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLISSPAPTASPPAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTPSPRPSPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGTRDVGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTSTTASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSPFLMAKPKQKDEKNITKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNLSSHKKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHLINETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHSLSSVTVVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSVRAGQGDTIRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRTRLRLDGAAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFLSLDRDKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPSLRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTILFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHIRRAQPWALLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPTSGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERPSRIPST	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHVSIMRMVRHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDTVTMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRLPPEPERPFAAFTAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGAALRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KKDLSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPQLPPAQGRNIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPRAKLQSTRIRRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTQNLNRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSPSSGKKGTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEDQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LVMSEEFREGKGVWK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPEPASPEK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTPGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSELSRSTMTVS	Homo sapiens

1978	189895	Receptor GPR61	AAK12637.1	1687	SSGAPQITPHRTFGGK	Homo sapiens
1979	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEEELRPSREGSIEE	Homo sapiens
1980	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWVSRPLSPKQE	Homo sapiens
1981	189900	Spingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1982	189900	Spingolipid Receptor Edg8	LR1	316	ALERSLTMARRGPAPVSS	Homo sapiens
1983	189900	Spingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1984	189900	Spingolipid Receptor Edg8	LR1	318	CGRDPSGSGQSASAAEASG	Homo sapiens
1985	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2266	ASRKAEAIGKLK/VQGEVS	Homo sapiens
1986	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2271	RVDYLLHETWRFGAAC	Homo sapiens
1988	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2272	HQSRAALLGLTRGRQGPVSD	Homo sapiens
1989	189901	(HEOAD54) G Protein-Coupled Receptor Ls189901	ENSP000000071589	2273	CIHTRPWTSNTVFLVSL	Homo sapiens
1990	189901	G Protein-Coupled Receptor Ls189901	ENSP000000071589	2274	RGRQGPVSDSSVQPSR	Homo sapiens
1991	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIKYPFREHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGTTCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATALPLE	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSKWKYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNQLRHFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFPLAVGNPDQLQIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NILRHNAIRHYSPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMISLQRPFGMSID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSKFLPQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHTRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1716	KNKSFGGWINTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1717	RNINEVYGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1719	TSKSKSSSTTYFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1720	DKSLSLAHADGDDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLLRISDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAGDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVLTITQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTILFDGERERK	Homo sapiens
2013	190031	G Protein-Coupled	AAD55586.1	1729	EGKEGDYRIPERLLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNLRNNQNNQVKKDKAAK	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSIPVVLFDALT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	327	CPKFVNKLSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGAVKK	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKDKRA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMRLTSI	Homo sapiens
2022	190188	G Protein-Coupled Receptor LGR6	LR36	439	ENHDQDLDELQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPFRDDLRRLPRAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDEESSKRPLGLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAAGELEKSSC	Homo sapiens
2026	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1836	CAARRQHALLYNVKRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSESSV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESLPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHKTIKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHPDLPGTGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQAALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGQINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSEFGK	Homo sapiens
2036	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSYNLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTSPYYWWPNWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIVVKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYLSLSFISIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFLFLWIHVRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MIDPTISTLDTLTP	Homo sapiens
2043	190427	Cysteinyl Leukotriene Receptor	CYSLT2 LR49	471	ASSIMILDSGSEQNGSVTSC	Homo sapiens
2044	190427	Cysteinyl Leukotriene Receptor	CYSLT2 LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	Cysteinyl Leukotriene Receptor	CYSLT2 LR49	473	KDRLKSALRKGHPPQAKATKC	Homo sapiens
2046	190427	Cysteinyl Leukotriene Receptor	CYSLT2 LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2253	CTIENFKREFPIVYLIF	Homo sapiens
2048	190427	Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2254	GVLGNGLSIVFLQPYK	Homo sapiens
2049	190427	Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2255	ADYLRGSGNWIFGDLAC	Homo sapiens
2050	190427	Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2256	FRLLHVTIRS AWILC	Homo sapiens

2051	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2257	CGIIWILUMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2258	CLELNLYKIAKLQTMNVAL	Homo sapiens
2053	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2260	VSHRKALTTIITLIFFLC	Homo sapiens
2054	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2261	CFLPYHTLRTVHLTWKVGL	Homo sapiens
2055	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2262	CKDRLHKALVITLALA	Homo sapiens
2056	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2263	YFAGENFKDRLKSALRKG	Homo sapiens
2057	190427	Receptor	Cysteinyl Leukotriene C ₅ SLT2	NP_065110.1	2264	HPQKAKTKCVFPVSVWLKKE	Homo sapiens
2058	190437	G Protein-Coupled Receptor C5L2	LR31		429	DSVSYEYGDYSDLSDRPVDC	Homo sapiens
2059	190437	G Protein-Coupled Receptor C5L2	LR31		430	RESQGGQDESVDKKSTSHD	Homo sapiens
2060	190437	G Protein-Coupled Receptor C5L2	LR31		431	PSAIYRLHQEHFPARLQC	Homo sapiens
2061	190437	G Protein-Coupled Receptor C5L2	LR31		432	CHWALRESQGGQDESVDKKKS	Homo sapiens
2062	190437	G Protein-Coupled Receptor C5L2	NP_060955.1		2818	MGNDVSVEYGDYSDLSDRPVDC	Homo sapiens
2063	190438	G Protein-Coupled Receptor Ls190438	ENSP00000080322		2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	G Protein-Coupled Receptor Ls190484	LR33		434	EADLGATGHRPRTELDDED	Homo sapiens
2065	190484	G Protein-Coupled Receptor Ls190484	LR33		435	RTCHRRQQQPAACRGFARVAR	Homo sapiens
2066	190484	G Protein-Coupled Receptor Ls190484	LR33		436	EERPGSFTPTPEQTGLDSEG	Homo sapiens
2067	190484	G Protein-Coupled Receptor Ls190484	LR33		437	RSDPTAQPQLNPTAQPQSD	Homo sapiens
2068	190595	G Protein-Coupled Receptor SH120	NP_057418.1		1730	RNVTDIDLALERRLLQ	Homo sapiens
2069	190595	G Protein-Coupled Receptor SH120	NP_057418.1		1731	KKKRMAMARRIMFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTTSASGSENLTUQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDVPTRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGSLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRIMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPPIYGSLSKAGNAYSRLHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSHSSVTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKLLNLTGMRRKNTCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTLVQAIRITSVMNE	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQRLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPVPSYRSRTHST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRQGE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRRPVAVDVLNLTASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFSGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQGESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAAERKTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWFVFSV	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor	AAF61299.1	1441	VAIAYVKKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor	AAF61299.1	1443	CNMSKRMIDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor	AAF61299.1	1444	RQSVVEFPFDSEGPTPE	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHIRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRREFRKALKSLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATTKPEHEDQGQLQ	Homo sapiens
2101	190711	Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGVTSFIREEDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVGFVAASQN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLLVLDDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTILLYCRKSLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGVARRQAPAGDRIC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKELINRLLHRRSHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEGKRRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEEVSGALSPPSASAVVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMAATHAVVYVKLLFEYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGTFRDLRSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	558	KDCIESTGDYELLCD AEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDGSR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLQEKQEKNIHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQRPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5C	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RSGGEGGPQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLGTQVFFLLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGGSMEFVENKAFSMDE	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQRKSMDSKGQKYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLVMRKKNKINHNLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNNKINLPLIFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMLKIASMHSSQQRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSPRTPSDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTISSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSFLFLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPIUYAVWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSLRSD	Homo sapiens

2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPPLRRLPGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQTPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDNSTINLSLSTRVTLAFL	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLRHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHILFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLRIVLMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSSWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFFSEWYLAITSFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYFNMINIWSLWKRDHLRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRLSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVLHQRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTTPGKTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDTATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FRL2)	LR14	481	TEVPDQAQTSNTHTSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FRL2)	LR14	522	GDTAVERLNVFITMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FRL2)	LR14	523	MSLAKRVMTGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FRL2)	LR14	525	LHFIIGFTVPMISITV	Homo sapiens

2160	190948	like 2 (FPRL2)	NP_038475.1	1658	DELLEAPGDLETLPRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLDVLRLGSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVWGLVSPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMHILSSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLHETHGGLLDGGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVNLIALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSGKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRRLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGSEASSTRRGGG	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RIYLAKEGARLISDANGK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEIYYKHVHC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNINWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIVRRVRVSVKRVSV	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSVYRTRGVGVK/PR	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATSLQDNRRKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVWA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMFI	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSTINLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TLTISTNRTNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLTHGLQTDSCCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLISCSSENIQIEHA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QGAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGEF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQQPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFTTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLILWWKDSV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFISDNTIEVRINRTLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIQSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3	AAK15076.1	1666	RDVESKVLTKLDPEQK	Homo sapiens
2203	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1667	KIGNDSVAIEIQAITDNC	Homo sapiens
2204	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1668	CSEERKTFNLNVQMNSMDIR	Homo sapiens
2205	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1669	EEMDKKDQVYLNQVWSAA	Homo sapiens
2206	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	AAK15076.1	1670	SKSVTLTFQHVVKMTPTK	Homo sapiens
2207	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2142	CLLLPTAVIVFSVVKIAK	Homo sapiens
2208	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2144	RPDSIPQLSVVPTLLA	Homo sapiens
2209	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2145	CQTGGLKATKKKSLG	Homo sapiens
2210	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2146	RLHTVTVRKSSAVLE	Homo sapiens
2211	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2620	PTAVIVFSVVKIAKV	Homo sapiens
2212	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRLREVVGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSERRRLGDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRSARNSRGPPEQPNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQPNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVVLK	Homo sapiens
2217	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDSLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHHFVMDARNRSVPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKEAYSERPGGILL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRILPLRNGRVA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGKNDDIKTKKELVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTYRDSKEKRDRLNFK	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTKINERFTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVWFIVRTERSLHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALFWFDSREISFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMMKLAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPVRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDQSASVDMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYQYPKSLDILSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGDNINIDFNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SQNGNPNQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNFLRSLPTLHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1845	CNPSVPKGRVMKLTGM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1846	RLTRWRTRYKTRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1847	KDGVESCAFDLISPDVDL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1848	LSGNFQKRLPQIQRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1849	TIIPSRKKTVPDIYIC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1907	RRATEKEINNMGNLTKSHF	Homo sapiens
2243	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2089	CRIEGDTISQVMPPLIIVA	Homo sapiens
2244	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2091	CESFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2094	TVPSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2095	CSLKPQPGHSGTKQRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKS80/GPR81	AAK29071.1	2096	CISVANSFQSQSDGGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor LS194757	CAB82385.1	2034	RTRKGHSEATNSSNRVIFYC	Homo sapiens
2252	194757	G Protein-Coupled Receptor LS194757	CAB82385.1	2035	RVISQISADNYKIHGDPISA	Homo sapiens
2253	194757	G Protein-Coupled Receptor LS194757	CAB82385.1	2036	TSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor LS194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor LS194858	LR84	1933	LGIAWDRRLRSPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor LS194858	LR84	1934	GERYMAVLRPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor LS194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor LS194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor LS194858	LR84	1937	RDSPGPSIAYHPSSQSSVD	Homo sapiens
2260	194878	MrgX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor G Protein-Coupled Receptor GPCR _{B3}	ENSP00000198236	1991	CIAFKIMPFSAQVGDER	Homo sapiens
2262	194903	Receptor GPCR _{B3}	ENSP00000198236	1992	KAEEAYARADKKAPRPC	Homo sapiens
2263	194903	Receptor GPCR _{B3}	ENSP00000198236	1993	ETIKQWHGKDNQVPKSV	Homo sapiens
2264	194903	Receptor GPCR _{B3}	ENSP00000198236	1994	CSYLGKDLPENYNEAK	Homo sapiens
2265	194904	WO0034334-hFB41A	LR114	2011	SDYDMLDEDEDVTNS	Homo sapiens
2266	194904	WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRTYMASVYNTRHVC	Homo sapiens
2268	194905	Receptor MGC7035	LR112	1987	CAKMQNAEAAADATLVF	Homo sapiens
2269	194905	Receptor MGC7035	LR112	1988	DRDTGRLEPSAHRLLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNGSFFSKLQRLMKKLPC	Homo sapiens
2271	194907	Receptor MGC7035	LR116	2003	CARAAAGDAPLRSLEQANRTR	Homo sapiens
2272	194907	Receptor 14273	LR116	2004	VISYSKILQTTKASRKRL	Homo sapiens
2273	194907	G Protein-Coupled Receptor 14273	LR116	2005	TVSLAYSRSHQIRVSGQD	Homo sapiens
2274	194907	G Protein-Coupled Receptor 14273	LR116	2006	CTWFPEKGALTDTSVKRND	Homo sapiens
2275	194908	G Protein-coupled Receptor Gpcrb4	LR117	2007	TYGRDNGQLGERVARRDIC	Homo sapiens
2276	194908	G Protein-coupled Receptor Gpcrb4	LR117	2008	QETLPTLQPNQNMTEERQR	Homo sapiens
2277	194908	G Protein-coupled Receptor Gpcrb4	LR117	2009	RTSQSYTCNQECNCLNAT	Homo sapiens
2278	194908	G Protein-coupled Receptor Gpcrb4	LR117	2010	RPQSHPRITDPPDKITVSC	Homo sapiens
2279	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVIVTGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSSLLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKGQAIIETSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPVVQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KLIISGDEVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSTISLFL	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	LNISHLRKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSSQETT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMKDLTYSSVKR	Homo sapiens

SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin-2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

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192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y1	Chemicon
218	3595	Purinergic Receptor P2Y1	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpa Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpa Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis

97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biemann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biemann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

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313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpha Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothed	Research Diagnostics
391	16599	Smoothed	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpha Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpha Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz

503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpa Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpa Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpa Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman

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(54) Title: **ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES**

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/12 C07K14/705 C07K16/28 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EMBL, SEQUENCE SEARCH, EPO-Internal, WPI Data, BIOSIS, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZHOU FENG C ET AL: "Production and characterization of an anti-serotonin 1A receptor antibody which detects functional 5-HT1A binding sites." MOLECULAR BRAIN RESEARCH, vol. 69, no. 2, 8 June 1999 (1999-06-08), pages 186-201, XP002222431 ISSN: 0169-328X figure 1; table 1 --- -/--	1-10, 15-26

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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Bucka, A

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 01/50107

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RAYMOND JOHN R ET AL: "Immunohistochemical mapping of cellular and subcellular distribution of 5-HT-1A receptors in rat and human kidneys." AMERICAN JOURNAL OF PHYSIOLOGY, vol. 264, no. 1 PART 2, 1993, pages F9-F19, XP001127496 ISSN: 0002-9513 the whole document, in particular figures 1, 3</p>	1-10, 15-26
Y	<p>VERDOT L ET AL: "PRODUCTION OF ANTI-PEPTIDE ANTIBODIES DIRECTED AGAINST THE FIRST AND THE SECOND EXTRACELLULAR LOOP OF THE HUMAN SEROTONIN 5-HT1A RECEPTOR" BIOCHIMIE, MASSON, PARIS, FR, vol. 76, no. 1, 1994, pages 165-170, XP008009332 ISSN: 0300-9084 the whole document</p>	1-10, 15-26
Y	<p>TODD E ANTHONY AND EFRAIAN C. AZMITIA: "Molecular characterization of antipeptide antibodies against the 5-HT1A receptor: Evidence for state-dependent antibody binding." MOLECULAR BRAIN RESEARCH, vol. 50, no. 1-2, 15 October 1997 (1997-10-15), pages 277-284, XP002222432 ISSN: 0169-328X the whole document</p>	1-10, 15-26
A	<p>ECKARD C P ET AL: "CHARACTERISATION OF G-PROTEIN-COUPLED RECEPTORS BY ANTIBODIES" CURRENT MEDICINAL CHEMISTRY, BENTHAM SCIENCE PUBLISHERS BV, BE, vol. 7, no. 9, September 2000 (2000-09), pages 897-910, XP000984970 ISSN: 0929-8673 the whole document.</p>	1-10, 15-26
A	<p>BACKSTROM JON R ET AL: "Generation of anti-peptide antibodies against serotonin 5-HT2A and 5-HT2C receptors." JOURNAL OF NEUROSCIENCE METHODS, vol. 77, no. 1, 7 November 1997 (1997-11-07), pages 109-117, XP002222433 ISSN: 0165-0270 the whole document</p>	1-10, 15-26

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EASON MARGARET G ET AL: "Identification of a G-s coupling domain in the amino terminus of the third intracellular loop of the alpha-2A-adrenergic receptor: Evidence for distinct structural determinants that confer G-s versus G-i coupling." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 42, 1995, pages 24753-24760, XP002222434 ISSN: 0021-9258 the whole document</p>	<p>1-10, 15-26</p>

INTERNATIONAL SEARCH REPORT

national application No.
PCT/US 01/50107

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 19 and 20 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-10, 15-26 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-10, 15-26, all partially

an isolated antigenic peptide having the amino acid sequence SEQ ID NO: 692, nucleic acids encoding said peptide, antibodies directed against said peptide, kits containing said antibodies

Inventions 2 to 1600: claims 1-26,
all partially and in so far as applicable

each separate, individual invention relates to an isolated antigenic peptide, nucleic acids encoding said peptide, antibodies directed against said peptide, kits containing said antibodies,
wherein invention 2 is represented by the peptide having the amino acid sequence SEQ ID NO: 693,
invention 3 is represented by the peptide having the amino acid sequence SEQ ID NO: 694,
continuing to invention 1600, which is represented by the peptide having the amino acid sequence SEQ ID NO: 2292

Invention 1601: claims 27-66

a method of identifying an amino acid sequence of an antigenic peptide derived from a candidate polypeptide, peptides identified by that method, antibodies directed against said peptides